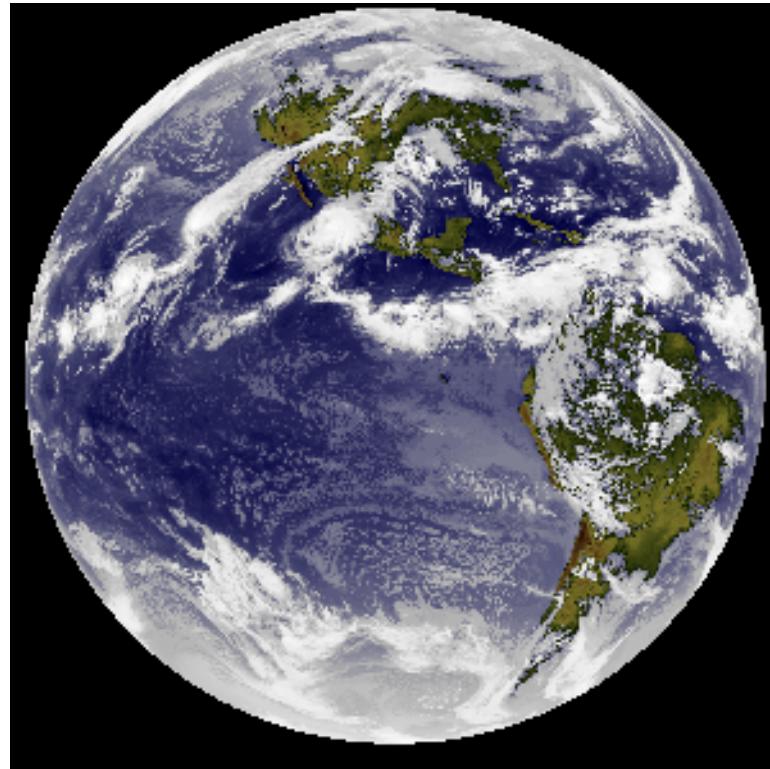


# **INTERNATIONAL PETROLEUM STATISTICS REPORT**

**May 1999**



## Preface

The International Petroleum Statistics Report is a monthly publication that provides current international oil data. This report is published for the use of Members of Congress, Federal agencies, State agencies, industry, and the general public. Publication of this report is in keeping with responsibilities given the Energy Information Administration in Public Law 95-91 (Section 205(a)(2)) that states:

"The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze and disseminate data and information ..."

The International Petroleum Statistics Report presents data on international oil production, demand, imports, and stocks. The report has four sections. Section 1 contains time series data on world oil production, and on oil demand and stocks in the Organization for Economic Cooperation and Development (OECD). This section contains annual data beginning in 1990, and monthly data for the most recent two years. Section 2 presents an oil supply/demand balance for the world. This balance is presented in quarterly intervals for the most recent two years. Section 3 presents data on oil imports by OECD countries. This section contains annual data for the most recent year, quarterly data for the most recent two quarters, and monthly data for the most recent twelve months. Section 4 presents annual time series data on world oil production and oil stocks, demand, and trade in OECD countries. World oil production and OECD demand data are for the years 1970 through 1998; OECD stocks from 1973 through 1998; and OECD trade from 1988 through 1998.

Data for the United States are developed by the Energy Information Administration's (EIA) Office of Oil and Gas. Data for other countries are derived largely from published sources, including International Energy Agency publications, the EIA International Energy Annual, and the trade press. (See sources after each section.) All data are reviewed by the International Energy Statistics Team of EIA. All data have been converted to units of measurement familiar to the American public. Definitions of oil production and consumption are consistent with other EIA publications.

General information about this publication may be obtained from W. Calvin Kilgore, Director, Office of Energy Markets and End Use, (202) 586-1617, and from Louis D. DeMouy, Director, Integrated Energy Statistics Division, (202) 586-8994. Detailed questions and comments concerning the contents of the International Petroleum Statistics Report may be directed to Michael J. Grillot, Team Leader, International Energy Statistics Team, (202) 586-6577, Patricia A. Smith (202) 586-6925, or H. Vicky McLaine (202) 586-9412; Oil Market Chronology - Douglas MacIntyre (202) 586-1831.

## Oil Market Chronology - April 1999

The following chronology lists international events that hold significance for world petroleum markets. Sources include: Dow Jones (DJ), The New York Times (NYT), The Washington Post (WP), and The Wall Street Journal (WSJ).

- April 3** The Iraqi port of Mina al-Bakr, export terminal for roughly half of all Iraqi oil exports under the United Nations oil-for-food program, is reopened, following allied air strikes on Basra, in southern Iraq, the previous day. The attacks struck a communications facility and a radio relay station, which is used, in part, as one of three relay stations controlling the flow of crude oil from Iraq's southern oil fields to the port of Mina al-Bakr. (DJ)
- April 5** Following the arrival in the Netherlands of two Libyan suspects in the 1988 bombing of Pan American Flight 103 that killed 270 people, United Nations sanctions against Libya are suspended. The sanctions, imposed on March 31, 1992, initially included a ban on the sale of equipment for refining and transporting oil, but excluded oil production equipment. Sanctions were then expanded on November 11, 1993, to include a freeze on Libya's overseas assets, excluding revenue from oil, natural gas, or agricultural products. (DJ)
- April 9** Saga Petroleum SA, a Norwegian company, announces that its oil interests in Angola are up for sale. A Saga spokesman said that the company will concentrate on developing low-cost oil reserves in Libya and possibly Iran, as opposed to more expensive deepwater acreage off Angola. (DJ)
- April 12** The U.S. Deputy Ambassador to the United Nations, Peter Burleigh, becomes the first U.S. official to publicly reject a proposal that would allow direct foreign investment in Iraq's oil sector. The proposal was an attempt to allow Iraq to generate oil revenues closer to the target of \$5.26 billion every 180 days under the United Nations oil-for-food program. So far, Iraq has not come close to the target ceiling since it was raised last year. However, Burleigh says that, if recent oil price increases of \$5 to \$6 per barrel are sustained, Iraq could "get to the \$5.2 billion level for 6 months" by the end of the year. This would eliminate the need to enact "deep structural" changes in the oil-for-food program, according to Burleigh. (DJ)
- April 15** A consortium of British Gas and Royal Dutch/Shell bought a controlling 53 percent stake in Cia. De Gas de Sao Paulo (Comgas), Brazil's largest natural gas distributor, for \$1 billion, more than double the Brazilian government's minimum asking price. The British Gas - Royal Dutch/Shell consortium beat out a rival bid from a consortium led by Enron Corporation and Italy's Agip. The privatization of Comgas is the first state asset sale since Brazil devalued its currency in January. (WSJ)
- The U.S. Department of Energy (DOE) announces that it will begin taking oil deliveries within the next few days under its plan to add 28 million barrels of oil to the U.S. Government's Strategic Petroleum Reserve (SPR) from federal oil royalty payments. In Phase 1 of the plan, the SPR is expected to acquire about 43,000 barrels per day over the next 3 months from oil companies operating in the Gulf of Mexico. Although about 50 percent of the oil supplied in Phase 1 will be imported, domestic producers would still benefit from the entire acquisition since the oil market is international and fungible, according to a DOE official. Under Phase 2 of the program, the DOE expects to acquire about 100,000 barrels per day of royalty oil over a 6-month period. (DJ)
- April 17** An oil pipeline that transports oil from Baku, Azerbaijan, to Suspa, Georgia, is officially opened. This is the second pipeline dedicated to exporting Caspian Sea oil, but the first built since the Soviet Union disbanded in 1991. The other Caspian Sea oil pipeline, which runs through the Russian breakaway republic of Chechnya to the Russian port of Novorossisk, is often shut down. The new pipeline to Georgia has a capacity of 100,000 barrels per day. (DJ)
- April 20** The European Union follows the United Nations in suspending sanctions against Libya that prevented the supply of certain oil export and aviation-related goods and services (see April 5 item above). (DJ)
- April 23** The United Nations temporarily waives the requirement under the Iraq oil-for-food program that more than half of Iraqi oil exports must go through the pipeline to Turkey. As Iraq's oil production has increased, capacity through the Iraq/Turkey pipeline has not kept pace. Designed to handle up to 1.1 million barrels per day, the pipeline's capacity is now only about 900,000 barrels per day due to needed repair work. It is currently unclear as to when repair work on the second Iraqi oil pipeline into Turkey might allow it to become operational. So far, only about 45 percent of Iraqi oil exports are going through the pipeline into Turkey. (DJ)

- April 24** The chief executive officer of Total, a major French oil company, meets with the Crown Prince of Saudi Arabia to discuss the possibility of future oil investments in Saudi Arabia. This follows separate meetings between either the Crown Prince or the Saudi Arabian oil minister with the chief executives of Exxon, Mobil, Marathon, and Conoco earlier in the month. All of these meetings are a result of an invitation last September by the Crown Prince for oil executives to submit proposals on areas of investment in the Saudi oil and natural gas sectors. However, Saudi Arabia has stated that it is mainly interested in downstream oil and gas joint ventures, ruling out upstream oil development at this time, since Saudi Arabia feels it is self-sufficient in this aspect of the industry. (DJ)
- The Kuwaiti oil minister announces that within the next 2 months, Kuwait is expecting to invite foreign oil companies to submit proposals for developing its northern oil fields. This would mark the first opening of the upstream sector in Kuwait since its oil industry was nationalized in the 1960s. However, the Kuwaiti oil minister made it clear that any foreign participation would be carried out in accordance with Kuwait's constitution, which bars foreign ownership of Kuwaiti natural resources. Total reserves of the fields being opened for development amount to 16 billion barrels. Kuwait hopes to increase production capacity from these fields to 1.3 million barrels per day from the current level of 590,000 barrels per day. (DJ)
- April 26** The European Union passes a ban of fuel shipments from its member countries to Yugoslavia as a means of putting economic pressure on Yugoslav President Slobodan Milosevic. The ban on shipments of crude oil and refined petroleum products is to begin on May 1. It does not include a blockade on shipments from non-European Union members, an issue that is under study by the North Atlantic Treaty Organization. (DJ)
- April 27** Azerbaijan's state-owned oil company Socar, signs 3 oil and natural gas production sharing agreements totaling an estimated \$10 billion with Exxon, Mobil, and privately-held Moncrief Oil International. Exxon's agreement with Socar to develop the offshore Zafar/Mashal exploration block will amount to a total investment of \$5 billion. Mobil's agreement to develop an offshore exploration block containing the Savalan, Dalga, Lerik-Deniz, and Janub prospects is worth about \$4.5 billion. The agreement between Socar and Texas-based Moncrief is for an onshore block in the Lower Kura River Valley and accounts for the remainder of the investment. (DJ)
- April 28** The U.S. Department of Treasury's Office of Foreign Asset Control (OFAC), notifies Mobil that it has turned down Mobil's request for a license to swap crude oil it produces in Turkmenistan in exchange for Iranian oil. Mobil had hoped to be allowed to ship oil produced in Turkmenistan to northern Iranian oil refineries, while Iran, in turn, would provide Iranian oil from Iran's Persian Gulf export terminals to Mobil for shipment to global markets as payment. OFAC is responsible for enforcing U.S. unilateral sanctions against foreign countries. As a result of OFAC's denial of a swap arrangement with Iran, Mobil will have to continue exporting its Turkmenistan oil production across the Caspian Sea by barge to Azerbaijan, where it is then carried by rail or pipeline to Black Sea ports. (DJ, WP)
- April 29** Spain's Repsol announces a bid to acquire the 85.01 percent of Argentina's YPF that it does not already own. If the deal goes through, it would create the world's eighth largest energy group, with annual revenues of more than \$26 billion. Repsol is offering a 25.4 percent premium over YPF's closing price, which would amount to about \$13.44 billion if all of YPF's shareholders take the offer. Repsol said the deal would only go through if it could obtain at least a controlling share (more than 50 percent) of the company. In January, Repsol paid the Argentine government \$2.01 billion for a 14.99 percent share of YPF. Repsol is prepared to pay in cash, a requirement under YPF's company statutes for any buyer of 15 percent or more of YPF. (DJ)
- April 30** Under new rules instituted by Ecuador's government, state-run Petroecuador will be allowed to have private partners, either foreign or domestic, in order to increase oil production. The rules state that the partnership contracts will have 20-year terms and be awarded to the companies or consortiums that offer the most participation for Petroecuador. As a result of the new rules, Ecuador is expecting investments of between \$1 billion and \$2 billion over the next four years.

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## **1. Annual and Monthly Oil Data**

Figure 1. World Crude Oil Production, Monthly

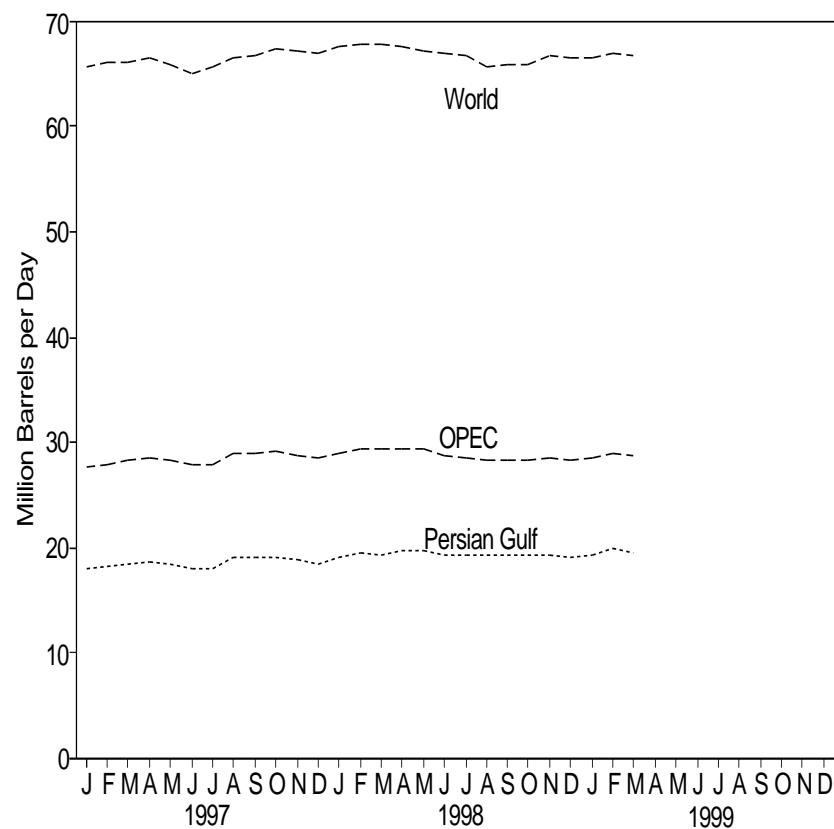
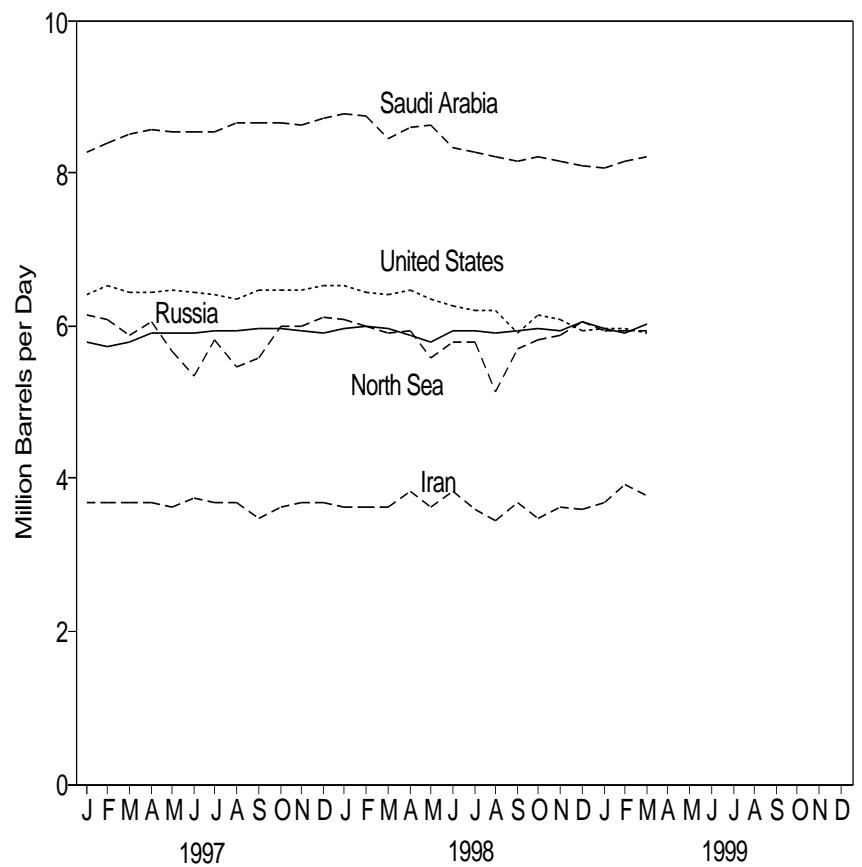


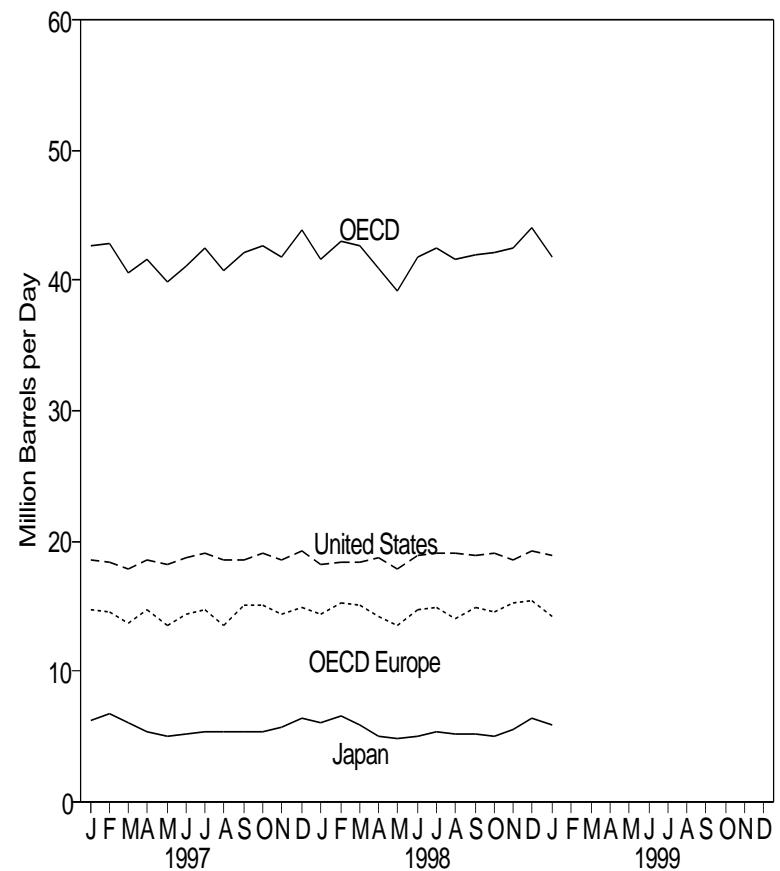
Figure 2. Leading Crude Oil Producers, Monthly



Source: Tables 1.1a-1.1c

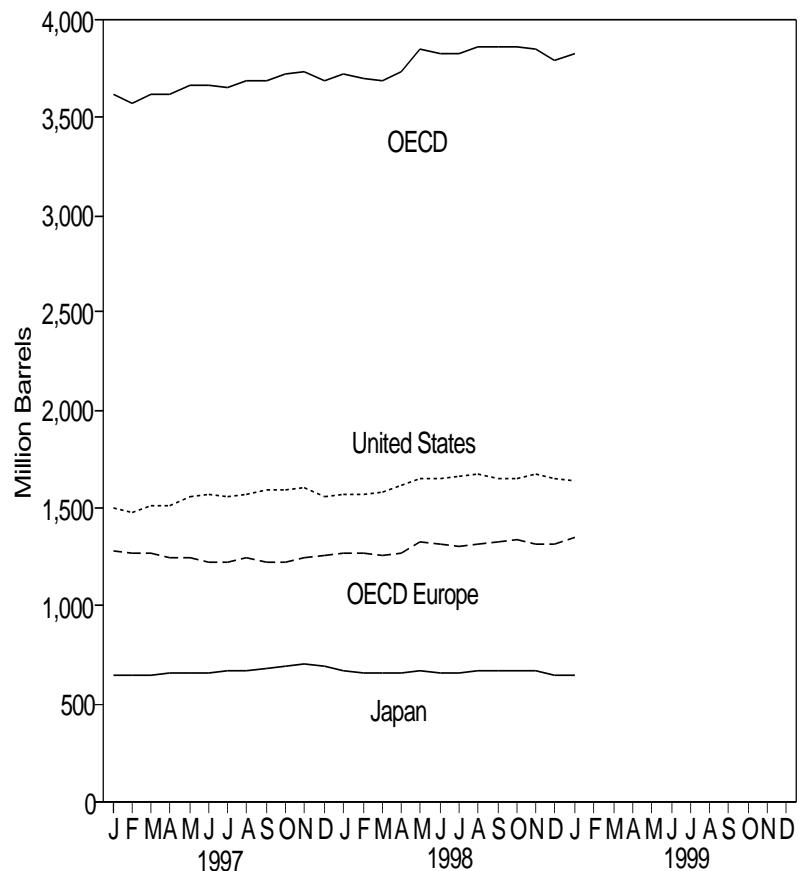
Source: Tables 1.1a-1.1c

Figure 3. OECD Oil Consumption, Monthly



Source: Table 1.7

Figure 4. OECD Oil Stocks, Monthly



Source: Table 1.5

**Table 1.1a World Crude Oil Production (Including Lease Condensate), 1990-Present**  
 (Thousand Barrels per Day)

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1990 Average.....	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average.....	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average.....	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average.....	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average.....	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average.....	1,202	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,004
1996 Average.....	1,242	1,547	3,686	579	2,062	1,401	2,188	510	8,218	2,278	3,053	26,764
1997 Average.....	1,277	1,546	3,664	1,187	2,083	1,446	2,317	649	8,562	2,316	3,315	28,362
1998 January.....	1,290	1,520	3,635	1,261	2,215	1,450	2,218	715	8,765	2,435	3,440	28,944
February.....	1,290	1,520	3,635	1,703	2,210	1,450	2,263	735	8,760	2,435	3,410	29,411
March.....	1,290	1,520	3,635	1,825	2,210	1,450	2,380	735	8,460	2,480	3,410	29,395
April.....	1,270	1,520	3,835	1,985	2,115	1,400	2,238	705	8,585	2,420	3,240	29,313
May.....	1,250	1,520	3,635	2,245	2,105	1,360	2,230	705	8,625	2,330	3,240	29,245
June.....	1,240	1,490	3,835	1,920	2,105	1,360	2,210	705	8,325	2,300	3,210	28,700
July.....	1,230	1,490	3,585	2,355	2,075	1,360	2,160	685	8,275	2,280	3,070	28,565
August.....	1,220	1,510	3,435	2,555	2,025	1,340	2,010	675	8,225	2,300	2,990	28,285
September.....	1,220	1,510	3,685	2,555	1,972	1,335	2,010	665	8,173	2,300	2,940	28,365
October.....	1,220	1,540	3,485	2,555	1,970	1,335	1,960	670	8,220	2,290	2,990	28,235
November.....	1,220	1,540	3,635	2,505	2,020	1,350	2,060	675	8,170	2,290	3,040	28,505
December.....	1,220	1,540	3,585	2,305	2,010	1,350	2,110	680	8,110	2,290	3,040	28,240
1998 Average.....	1,246	1,518	3,634	2,150	2,085	1,378	2,153	696	8,389	2,345	3,167	28,762
1999 January.....	1,230	1,540	3,665	2,515	1,995	1,360	2,080	695	8,065	2,240	3,020	28,405
February.....	1,240	1,520	3,925	2,655	2,005	1,360	2,010	695	8,165	2,330	3,000	28,905
March.....	1,250	1,530	3,795	2,430	2,020	1,360	2,160	775	8,220	2,235	2,960	28,735
1999 Average.....	1,240	1,530	3,791	2,529	2,007	1,360	2,086	723	8,150	2,266	2,993	28,674

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia. In March 1999, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 540 thousand barrels per day.

Notes: •OPEC=Organization of Petroleum Exporting Countries. •Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Sources: See end of Section 1.

**Table 1.1b World Crude Oil Production (Including Lease Condensate), 1990-Present**  
 (Thousand Barrels per Day)

	Norway	United Kingdom	North Seal/ <sup>1</sup>	Angola	Argen-tina	Austra- lia	Brazil	Canada	China	Colombia	Ecuador
1990 Average.....	1,704	1,820	3,667	475	483	575	631	1,553	2,774	440	285
1991 Average.....	1,890	1,797	3,811	500	485	545	630	1,548	2,835	419	299
1992 Average.....	2,229	1,825	4,182	526	553	535	626	1,605	2,845	433	321
1993 Average.....	2,350	1,915	4,403	509	594	503	643	1,679	2,890	456	344
1994 Average.....	2,521	2,375	5,058	536	650	536	671	1,746	2,939	450	365
1995 Average.....	2,768	2,489	5,400	646	715	562	695	1,805	2,990	585	392
1996 Average.....	3,104	2,568	5,822	709	756	570	795	1,837	3,131	623	396
1997 Average.....	3,153	2,517	5,843	720	835	588	833	1,893	3,200	662	381
1998 January.....	3,293	2,597	6,082	735	840	528	886	1,912	3,240	715	390
February.....	3,230	2,583	5,989	730	840	550	920	1,944	3,155	710	380
March.....	3,123	2,600	5,908	730	840	560	920	1,952	3,170	725	380
April.....	3,160	2,602	5,928	710	840	604	930	1,988	3,140	725	380
May.....	2,917	2,499	5,589	710	855	600	959	1,943	3,210	735	380
June.....	3,140	2,495	5,797	710	855	624	956	1,932	3,260	735	380
July.....	3,120	2,525	5,801	710	855	621	975	2,045	3,200	735	330
August.....	2,440	2,536	5,133	730	850	637	990	2,016	3,180	752	380
September.....	2,863	2,690	5,712	735	855	541	970	2,064	3,216	775	385
October.....	2,920	2,718	5,807	765	850	406	995	2,024	3,150	810	390
November.....	2,978	2,720	5,881	770	850	430	1,070	1,989	3,240	845	380
December.....	3,045	2,821	6,038	785	830	428	1,075	1,962	3,215	847	370
1998 Average.....	3,017	2,616	5,804	735	847	544	971	1,981	3,198	759	377
1999 January.....	3,002	2,721	5,922	780	815	509	1,128	1,892	3,230	843	370
February.....	R3,004	R2,728	R5,937	780	R820	R555	1,090	R1,878	3,235	R830	R380
March.....	3,006	2,731	5,946	790	820	474	1,110	1,808	3,215	830	380
1999 Average.....	3,004	2,727	5,935	783	818	511	1,110	1,859	3,226	834	377

<sup>1</sup>/ North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.

R=Revised data.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

**Table 1.1c World Crude Oil Production (Including Lease Condensate), 1990-Present**  
 (Thousand Barrels per Day)

	Egypt	Gabon	India	Malaysia	Mexico	Oman	Russia	Former U.S.S.R.	Syria	United States	Other <sup>1</sup> / World
1990 Average.....	873	270	660	619	2,553	685	--	10,975	388	7,355	2,253 60,566
1991 Average.....	874	294	615	646	2,680	700	--	9,992	492	7,417	2,274 60,207
1992 Average.....	881	298	561	653	2,669	740	7,632	--	481	7,171	3,228 60,212
1993 Average.....	890	313	534	640	2,673	776	6,730	--	554	6,847	3,280 60,238
1994 Average.....	896	329	590	645	2,685	810	6,135	--	560	6,662	3,382 60,992
1995 Average.....	920	365	703	682	2,618	851	5,995	--	575	6,560	3,410 62,331
1996 Average.....	922	368	651	695	2,855	883	5,850	--	604	6,465	3,509 64,054
1997 Average.....	874	368	675	746	3,023	887	5,884	--	561	6,452	3,706 66,317
1998 January.....	860	360	680	740	3,085	920	5,979	--	550	6,515	3,765 67,535
February.....	860	370	685	730	3,140	920	5,997	--	550	6,449	3,747 67,900
March.....	860	370	685	740	3,160	930	5,962	--	550	6,399	3,746 67,797
April.....	860	370	635	740	3,140	920	5,876	--	550	6,483	3,707 67,673
May.....	870	370	670	750	3,149	910	5,789	--	560	6,363	3,663 67,147
June.....	870	370	670	750	3,050	900	5,928	--	560	6,252	3,713 66,850
July.....	880	360	676	730	3,120	870	5,923	--	560	6,193	3,739 66,732
August.....	870	360	651	730	3,055	880	5,910	--	560	6,193	3,705 65,710
September...	870	350	625	720	2,906	890	5,936	--	550	5,918	3,723 65,947
October.....	870	350	638	720	2,792	890	5,979	--	550	6,152	3,745 65,950
November....	860	350	643	720	3,147	890	5,945	--	550	6,072	3,765 66,719
December....	860	350	679	720	3,107	880	6,040	--	550	5,938	3,765 66,507
1998 Average.....	866	361	661	733	3,070	900	5,938	--	553	6,243	3,732 66,865
1999 January.....	860	340	694	720	3,144	880	5,962	--	550 E5,954	R3,798	R66,597
February....	860	340	686	720	3,020	R900	5,897	--	550 RE5,984	R3,789	R66,952
March.....	860	340	660	720	3,053	900	6,024	--	550 PE5,888	3,826	66,720
1999 Average.....	860	340	680	720	3,074	893	5,963	--	550 PE5,941	3,805	66,750

<sup>1</sup>/ Other is a calculated total derived from the difference between "World" and the sum of production in "Total OPEC" (Table 1.1a) and all other countries listed (Tables 1.1b and 1.1c). The total "North Sea" is not subtracted from the world total, though Norway and the United Kingdom have been subtracted.

-- = Not applicable. R=Revised data. E=Estimated. PE=Preliminary estimate. RE=Revised estimate.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

**Table 1.2 OPEC Crude Oil Production (Excluding Condensate), 1990-Present**  
 (Thousand Barrels per Day)

		Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1990	Average...	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	2,097	22,458
1991	Average...	800	1,410	3,312	305	190	1,483	1,832	395	8,115	2,326	2,338	22,506
1992	Average...	772	1,326	3,429	425	1,058	1,433	1,820	423	8,332	2,206	2,334	23,558
1993	Average...	747	1,327	3,540	512	1,852	1,361	1,835	413	8,198	2,109	2,410	24,304
1994	Average...	750	1,334	3,583	548	2,025	1,378	1,821	380	8,120	2,113	2,542	24,594
1995	Average...	767	1,343	3,608	555	2,057	1,390	1,878	407	8,231	2,148	2,710	25,094
1996	Average...	812	1,367	3,651	574	2,062	1,401	2,051	475	8,218	2,198	3,013	25,822
1997	Average...	847	1,366	3,629	1,182	2,083	1,446	2,217	614	8,562	2,236	3,275	27,457
1998	January...	860	1,340	3,600	1,256	2,215	1,450	2,108	680	8,765	2,355	3,400	28,029
	February..	860	1,340	3,600	1,698	2,210	1,450	2,153	700	8,760	2,355	3,370	28,496
	March.....	860	1,340	3,600	1,820	2,210	1,450	2,270	700	8,460	2,400	3,370	28,480
	April.....	840	1,340	3,800	1,980	2,115	1,400	2,128	670	8,585	2,340	3,200	28,398
	May.....	820	1,340	3,600	2,240	2,105	1,360	2,120	670	8,625	2,250	3,200	28,330
	June.....	810	1,310	3,800	1,915	2,105	1,360	2,100	670	8,325	2,220	3,170	27,785
	July.....	800	1,310	3,550	2,350	2,075	1,360	2,050	650	8,275	2,220	3,030	27,650
	August....	790	1,330	3,400	2,550	2,025	1,340	1,900	640	8,225	2,220	2,950	27,370
	September.	790	1,330	3,650	2,550	1,972	1,335	1,900	630	8,173	2,220	2,900	27,450
	October...	790	1,360	3,450	2,550	1,970	1,335	1,850	635	8,220	2,210	2,950	27,320
	November..	790	1,360	3,600	2,500	2,020	1,350	1,950	640	8,170	2,210	3,000	27,590
	December..	790	1,360	3,550	2,300	2,020	1,350	2,000	645	8,110	2,210	3,000	27,325
1998	Average...	816	1,338	3,599	2,145	2,085	1,378	2,043	661	8,389	2,265	3,127	27,847
1999	January...	800	1,360	3,630	2,510	1,995	1,360	1,970	660	8,065	2,160	2,980	27,490
	February..	810	1,340	3,890	2,650	2,005	1,360	1,900	660	8,165	2,250	2,960	27,990
	March.....	820	1,350	3,760	2,425	2,020	1,360	2,050	740	8,220	2,155	2,920	27,820
	1999 Average...	810	1,350	3,756	2,524	2,007	1,360	1,976	688	8,150	2,186	2,953	27,759

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia. In March 1999, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 540 thousand barrels per day.

Notes: •OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

•Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Sources: See end of Section 1.

Table 1.3 World Natural Gas Plant Liquids Production, 1990-Present  
(Thousand Barrels per Day)

	Algeria	Canada	Mexico	Saudi Arabia	Russia	Former USSR	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1990 Average.....	130	426	428	620	--	425	1,559	930	1,107	1,281	4,632
1991 Average.....	140	431	457	680	--	420	1,659	931	1,113	1,299	4,827
1992 Average.....	140	460	454	713	230	--	1,697	1,003	1,185	1,364	4,975
1993 Average.....	145	506	459	704	220	--	1,736	1,040	1,238	1,435	5,181
1994 Average.....	140	529	461	698	200	--	1,727	1,071	1,267	1,465	5,293
1995 Average.....	145	581	447	701	180	--	1,762	1,106	1,301	1,506	5,485
1996 Average.....	150	596	423	697	185	--	1,830	1,082	1,295	1,501	5,582
1997 Average.....	145	631	386	723	200	--	1,817	1,108	1,310	1,488	5,571
1998 January.....	145	665	385	735	230	--	1,826	1,185	1,409	1,575	5,835
February.....	145	680	420	735	230	--	1,870	1,185	1,409	1,575	5,931
March.....	145	645	425	735	230	--	1,846	1,185	1,409	1,575	5,878
April.....	145	645	425	725	230	--	1,859	1,175	1,399	1,565	5,882
May.....	145	580	430	725	230	--	1,808	1,175	1,399	1,565	5,733
June.....	145	610	420	705	230	--	1,734	1,155	1,379	1,545	5,649
July.....	145	648	386	700	230	--	1,580	1,150	1,374	1,540	5,414
August.....	145	662	464	695	230	--	1,713	1,145	1,369	1,535	5,620
September....	145	625	435	695	230	--	1,716	1,145	1,369	1,535	5,619
October.....	145	667	415	695	230	--	1,736	1,145	1,369	1,535	5,671
November....	145	681	438	695	230	--	1,759	1,145	1,369	1,535	5,708
December....	145	705	447	690	230	--	1,604	1,140	1,364	1,530	5,585
1998 Average.....	145	651	424	711	230	--	1,753	1,161	1,385	1,551	5,709
1999 January.....	145	669	453	685	206	--	1,656	1,135	1,359	1,525	5,560
February....	145	R650	466	685	206	--	R1,722	1,135	1,359	1,525	R5,674
March.....	145	670	469	695	206	--	E1,603	1,145	1,369	1,535	5,587
1999 Average.....	145	663	463	688	206	--	E1,658	1,138	1,362	1,528	5,605

1/ U.S. geographic coverage is the 50 States and the District of Columbia. Excludes fuel ethanol blended into finished motor gasoline.

2/ See Appendix A for countries in this group.

3/ OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.

See Appendix A for countries in these groups.

R=Revised data. E=Estimated.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

**Table 1.4 World Oil Supply, 1990-Present**  
 (Thousand Barrels per Day)

	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1990 Average.....	9,677	16,249	17,232	24,536	66,754
1991 Average.....	9,883	15,704	16,747	24,625	66,632
1992 Average.....	9,768	17,010	17,871	25,818	66,960
1993 Average.....	9,602	17,792	18,505	26,610	67,361
1994 Average.....	9,413	18,072	18,745	27,031	68,250
1995 Average.....	9,400	18,351	19,069	27,566	69,860
1996 Average.....	9,445	18,486	19,259	28,321	71,764
1997 Average.....	9,461	19,641	20,407	29,905	74,091
1998 January.....	9,539	20,283	21,087	30,575	75,583
February.....	9,522	20,735	21,542	31,042	76,050
March.....	9,376	20,602	21,411	31,026	75,822
April.....	9,496	20,892	21,431	30,934	75,724
May.....	9,319	20,892	21,591	30,866	75,044
June.....	9,292	20,417	20,906	30,301	74,820
July.....	9,042	20,477	21,216	30,161	74,431
August.....	9,201	20,432	21,276	29,876	73,640
September.....	8,882	20,567	21,154	29,956	73,830
October.....	9,175	20,407	21,195	29,826	73,923
November.....	9,178	20,512	21,155	30,096	74,789
December.....	8,892	20,192	20,885	29,826	74,458
1998 Average.....	9,241	20,532	21,236	30,369	R74,834
1999 January.....	E8,916	20,382	21,014	29,986	R74,479
February.....	RE9,021	20,982	21,364	30,486	R74,956
March.....	PE8,744	20,692	21,214	30,326	74,576
1999 Average.....	PE8,889	20,675	21,192	30,259	74,661

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia. Beginning in 1993, includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants.

<sup>2/</sup> See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.

See Appendix A for countries in these groups.

R=Revised data. E=Estimated. PE=Preliminary estimate. RE=Revised estimate.

Notes: •Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery gain. See Explanatory Note 1 in Appendix B. •Monthly data are often preliminary and also may not average to the annual total due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

Table 1.5 Oil Stocks in OECD Countries, End of Period  
(Million Barrels)

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1990	December.....	140	172	265	112	1,163	1,621	121	590	73	3,568
1991	December.....	153	160	288	119	1,181	1,617	119	606	65	3,588
1992	December.....	146	174	310	113	1,219	1,592	107	603	67	3,588
1993	December.....	158	163	309	118	1,221	1,647	105	618	69	3,661
1994	December.....	158	164	312	115	1,240	1,653	119	645	69	3,726
1995	December.....	159	162	301	107	1,228	1,563	109	630	71	3,601
1996	December.....	158	152	300	108	1,256	1,507	103	651	74	3,591
1997	December.....	164	147	298	105	1,256	1,560	115	685	74	3,689
1998	January.....	163	154	298	111	R1,277	1,576	118	673	78	R3,722
	February.....	161	155	290	108	R1,272	1,572	110	664	75	R3,694
	March.....	155	146	285	109	R1,254	1,588	118	655	73	R3,688
	April.....	163	161	292	106	R1,274	1,614	116	658	75	R3,737
	May.....	171	168	306	111	R1,337	1,654	115	667	79	R3,852
	June.....	164	164	308	109	1,316	1,654	R116	658	R82	R3,826
	July.....	164	157	313	109	R1,306	1,665	115	660	75	R3,821
	August.....	168	161	319	106	R1,322	1,672	118	672	77	R3,862
	September....	170	158	317	107	R1,335	1,653	R120	676	79	R3,863
	October.....	170	162	321	109	R1,344	1,654	121	676	69	R3,863
	November....	161	157	320	99	R1,312	1,674	122	675	71	R3,854
	December....	161	153	321	108	R1,317	1,647	118	649	66	R3,797
	January.....	169	154	329	111	1,344	1,639	125	645	70	3,823

<sup>1/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

<sup>2/</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>4/</sup> "Other" consists of Australia, New Zealand, and the U.S. Territories.

R=Revised data.

Notes: •Oil Stocks - See Explanatory Note 2 in Appendix B. •See Section 4 for historical series.

Sources: See end of Section 1.

Table 1.6 Commercial and Government-Owned Oil Stocks in OECD Countries (End of December 1998)  
(Million Barrels)

Country	Commercial	Government Owned	Total
Canada.....	118	0	118
United States <sup>1/</sup> .....	1,076	571	1,647
United States Territories.....	22	0	22
Japan.....	334	315	649
Australia/New Zealand.....	44	NA	44
Austria.....	24	0	24
Belgium/Luxembourg.....	35	0	35
Denmark.....	26	0	26
Finland.....	25	0	25
France.....	161	0	161
Germany <sup>2/</sup> .....	266	55	321
Greece.....	R33	NA	R33
Ireland.....	8	2	10
Italy.....	147	6	153
Netherlands.....	94	0	94
Norway.....	67	0	67
Portugal.....	21	0	21
Spain.....	109	0	109
Sweden.....	32	0	32
Switzerland.....	45	0	45
Turkey.....	52	0	52
United Kingdom.....	108	0	108
OECD Europe.....	R1,254	63	R1,317
Total OECD.....	R2,848	949	R3,797

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> Data are for the unified Germany, i.e., the former East Germany and West Germany.

NA=Not Available. R=Revised data.

Notes: •Sum of components may not equal total due to rounding. •Oil Stocks - See Explanatory Note 2 in Appendix B.

•OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group.

Sources: See end of Section 1.

Table 1.7. OECD Oil Demand, 1990-Present

(Thousand Barrels per Day)

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1990	Average....	1,818	1,872	2,382	1,752	12,629	16,988	1,690	5,140	1,027	37,475
1991	Average....	1,935	1,863	2,828	1,801	13,391	16,714	1,622	5,284	1,056	38,067
1992	Average....	1,926	1,937	2,843	1,803	13,605	17,033	1,643	5,446	1,041	38,768
1993	Average....	1,875	1,852	2,900	1,815	13,523	17,237	1,688	5,401	1,118	38,967
1994	Average....	1,833	1,841	2,879	1,837	13,597	17,718	1,727	5,674	1,174	39,890
1995	Average....	1,896	2,048	2,875	1,845	14,120	17,725	1,755	5,711	1,243	40,553
1996	Average....	1,935	2,058	2,911	1,845	14,269	18,309	1,797	5,867	1,191	41,432
1997	Average....	1,955	2,045	2,903	1,799	14,433	18,620	1,857	5,711	1,229	41,850
1998	January....	2,040	2,030	2,734	R1,797	R14,299	18,256	R1,854	6,109	R1,138	R41,657
	February...	2,160	2,150	2,950	R1,846	R15,197	18,322	R1,829	6,465	R1,243	R43,057
	March.....	1,982	2,111	3,153	R1,867	R15,159	18,393	R1,861	5,905	R1,318	R42,637
	April.....	1,999	2,016	2,840	R1,718	R14,288	18,624	1,805	5,086	R1,174	R40,977
	May.....	1,822	1,891	2,594	R1,693	R13,496	17,876	1,766	4,806	R1,231	R39,174
	June.....	2,008	2,091	2,929	R1,787	R14,765	18,818	1,890	5,016	R1,251	41,741
	July.....	2,095	2,096	3,020	1,770	R14,879	19,140	1,955	5,316	1,208	R42,498
	August....	1,859	R1,877	R2,835	1,761	R14,031	19,108	1,910	5,282	R1,211	R41,541
	September..	2,051	2,033	3,019	1,798	R14,906	18,837	1,937	5,097	1,177	R41,954
	October....	1,990	2,021	2,865	1,811	R14,652	19,086	1,933	5,089	1,305	R42,067
	November...	2,078	R2,209	R2,985	1,861	R15,270	18,515	1,906	5,612	R1,267	R42,569
	December...	2,164	2,231	2,979	1,799	R15,405	19,198	1,915	6,379	R1,219	R44,117
	Average....	2,019	2,062	2,908	R1,792	R14,690	18,684	R1,881	5,509	R1,229	R41,992
1999	January....	2,001	2,067	2,557	1,699	14,209	18,850	1,822	5,881	995	41,757

1/ Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ U.S. geographic coverage is the 50 States and the District of Columbia.

4/ "Other" consists of Australia, New Zealand, and the U.S. Territories.

R=Revised data.

Notes: •The term Demand is used interchangeably with Consumption and Petroleum Products Supplied. See Appendix C for definition. •See Section 4 for historical series.

Sources: See end of Section 1.

## Sources for Section 1 (Annual and Monthly Oil Data)

### Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1997 and Petroleum Supply Monthly, April 1999.

Other Countries: Annual data -- EIA, International Energy Annual, various issues. Monthly data -- Canada -- Maclean Hunter Publishing Company, Oilweek, various issues. Denmark, Mexico, Netherlands, Norway, Germany, and all OPEC countries -- Petroleum and Energy Intelligence Weekly, Inc., Petroleum Intelligence Weekly, various issues. All Other Countries -- PennWell Publishing Company, Oil and Gas Journal various issues. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, December 1986.

### Oil Stocks

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, April 1999.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues.  
• OECD, Monthly Oil Statistics data base, 1985-1999.

### Oil Demand

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, April 1999.

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1985-1999.



## **2. International Oil Balance Data**

**Table 2.1 World Oil Balance, 1995-1999**  
 (Million Barrels Per Day)

	1995	1996	1997	1998				1999			
	Annual		Quarter		Annual		Quarter		Annual		
	Average		First	Second	Third	Fourth	Average	First	Second	Third	Fourth
<b>Supply<sup>1/</sup></b>											
OECD											
United States <sup>2/</sup> .....	9.40	9.44	9.46	9.48	9.37	9.04	9.08	9.24	8.89	NA	NA
Other OECD.....	9.80	10.29	10.46	10.66	10.43	10.24	10.44	10.44	10.42	NA	NA
Total OECD.....	19.20	19.74	19.92	20.14	19.80	19.28	19.52	19.68	19.31	NA	NA
Non-OECD											
OPEC.....	27.57	28.32	29.91	30.88	30.70	30.00	29.91	30.37	30.26	NA	NA
Former USSR.....	7.14	7.05	7.13	7.29	7.16	7.22	7.30	7.24	7.23	NA	NA
Other Non-OECD.....	15.95	16.65	17.14	17.50	17.54	17.47	17.65	17.54	17.86	NA	NA
Total Non-OECD.....	50.66	52.02	54.17	55.67	55.40	54.69	54.86	55.15	55.35	NA	NA
Total World Supply.....	69.86	71.76	74.09	75.81	75.19	73.97	74.39	74.83	74.66	NA	NA
<b>Demand<sup>3/</sup></b>											
OECD											
United States <sup>2/</sup> .....	17.72	18.31	18.62	18.32	18.43	19.03	18.94	18.68	NA	NA	NA
Other OECD.....	22.83	23.12	23.23	24.11	22.18	22.97	23.98	23.31	NA	NA	NA
Total OECD.....	40.55	41.43	41.85	42.43	40.61	42.00	42.92	41.99	NA	NA	NA
Non-OECD											
China.....	3.33	3.55	3.79	3.90	3.96	4.00	4.06	3.98	NA	NA	NA
Former USSR.....	4.62	4.38	4.26	4.54	4.09	4.09	4.45	4.29	NA	NA	NA
Other Non-OECD.....	21.43	22.16	23.11	23.52	23.37	22.93	24.50	23.58	NA	NA	NA
Total Non-OECD.....	29.38	30.09	31.16	31.97	31.42	31.02	33.01	31.85	NA	NA	NA
Total World Demand.....	69.93	71.52	73.01	74.40	72.04	73.02	75.93	73.85	NA	NA	NA
<b>Stock Draws / Discrepancy</b>											
Net Reported Stock Draws <sup>4/</sup>											
U. S. Commercial.....	.25	.08	-.15	-.32	-.72	.01	.15	-.22	NA	NA	NA
U. S. Strategic.....	.00	.07	.01	.00	.00	-.09	-.02	NA	NA	NA	NA
Other OECD.....	.09	-.12	-.13	.34	-.81	-.41	.66	-.06	NA	NA	NA
For Export & Afloat.....	-.12	-.01	-.12	-.44	.22	.22	-.05	-.01	NA	NA	NA
Commr. Floating Storage...	.00	.00	.00	-.11	-.11	-.22	.11	-.08	NA	NA	NA
Total Reported Draws.....	.22	.01	-.39	-.54	-1.41	-.40	.77	-.39	NA	NA	NA
Other Stock Draws and Statistical Discrepancy <sup>5/</sup>	-.15	-.26	-.69	-.88	-1.74	-.56	.78	-.60	NA	NA	NA

<sup>1/</sup> Supply includes production of crude oil (including lease condensate), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

<sup>2/</sup> U.S. geographical coverage is the 50 States and the District of Columbia. See Explanatory Note 1 in Appendix B.

<sup>3/</sup> The term Demand is used interchangeably with the terms Consumption and Petroleum Products Supplied. See Appendix C for definition.

<sup>4/</sup> Stock draws are positive numbers, stock additions are negative numbers.

<sup>5/</sup> This is computed as Total Demand minus the sum of Total Supply and Total Reported Stock Draw.

Note: Sum of components may not equal total due to rounding.

Sources: See end of Section 2.

**Table 2.2 World Oil Supply, 1995-1999**  
(Million Barrels Per Day)

	1995	1996	1997	1998				1999					
	Annual		Quarter				Annual		Quarter		Annual		
	Average		First	Second	Third	Fourth	Average		First	Second	Third	Fourth	Average
<b>OECD</b>													
United States <sup>1/</sup> ...	9.40	9.44	9.46	9.48	9.37	9.04	9.08	9.24	8.89	NA	NA	NA	NA
Canada.....	2.45	2.49	2.58	2.66	2.63	2.75	2.74	2.70	2.59	NA	NA	NA	NA
North Sea <sup>2/</sup> .....	5.80	6.22	6.24	6.42	6.17	5.86	6.26	6.18	6.31	NA	NA	NA	NA
Other OECD.....	1.55	1.58	1.63	1.58	1.63	1.63	1.44	1.57	1.52	NA	NA	NA	NA
Total OECD.....	19.20	19.74	19.92	20.14	19.80	19.28	19.52	19.68	19.31	NA	NA	NA	NA
<b>Non-OECD</b>													
<b>OPEC</b>													
Crude													
Algeria.....	1.20	1.24	1.28	1.29	1.25	1.22	1.22	1.25	1.24	NA	NA	NA	NA
Indonesia.....	1.50	1.55	1.55	1.52	1.51	1.50	1.54	1.52	1.53	NA	NA	NA	NA
Iran.....	3.64	3.69	3.66	3.63	3.77	3.57	3.57	3.63	3.79	NA	NA	NA	NA
Iraq.....	.56	.58	1.19	1.59	2.05	2.49	2.45	2.15	2.53	NA	NA	NA	NA
Kuwait.....	2.06	2.06	2.08	2.21	2.11	2.02	2.00	2.09	2.01	NA	NA	NA	NA
Libya.....	1.39	1.40	1.45	1.45	1.37	1.35	1.34	1.38	1.36	NA	NA	NA	NA
Nigeria.....	1.99	2.19	2.32	2.29	2.23	2.06	2.04	2.15	2.09	NA	NA	NA	NA
Qatar.....	.44	.51	.65	.73	.70	.68	.67	.70	.72	NA	NA	NA	NA
Saudi Arabia..	8.23	8.22	8.56	8.66	8.51	8.22	8.17	8.39	8.15	NA	NA	NA	NA
United Arab Emirates...	2.23	2.28	2.32	2.45	2.35	2.29	2.29	2.35	2.27	NA	NA	NA	NA
Venezuela.....	2.75	3.05	3.31	3.42	3.23	3.00	3.02	3.17	2.99	NA	NA	NA	NA
Natural Gas													
Plant Liquids	1.51	1.50	1.49	1.57	1.56	1.54	1.53	1.55	1.53	NA	NA	NA	NA
Processing Gain.	.06	.06	.06	.06	.06	.06	.06	.06	.06	NA	NA	NA	NA
Total OPEC.....	27.57	28.32	29.91	30.88	30.70	30.00	29.91	30.37	30.26	NA	NA	NA	NA
Former USSR.....	7.14	7.05	7.13	7.29	7.16	7.22	7.30	7.24	7.23	NA	NA	NA	NA
China.....	2.99	3.13	3.20	3.19	3.20	3.20	3.20	3.20	3.23	NA	NA	NA	NA
Mexico.....	3.09	3.31	3.44	3.57	3.57	3.48	3.48	3.52	3.56	NA	NA	NA	NA
Other Non-OECD....	9.86	10.21	10.50	10.75	10.77	10.78	10.97	10.82	11.07	NA	NA	NA	NA
Total Non-OECD....	50.66	52.02	54.17	55.67	55.40	54.69	54.86	55.15	55.35	NA	NA	NA	NA
Total Supply.....	69.86	71.76	74.09	75.81	75.19	73.97	74.39	74.83	74.66	NA	NA	NA	NA

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.

Notes: •Supply includes crude oil (including lease condensate), natural gas plant liquids, (except for individual OPEC countries), other hydrogen and hydrocarbons for refinery feedstocks, alcohol, liquids produced from coal and other sources, and processing gain (except for individual OPEC countries). For OPEC, natural gas plant liquids production and processing gain are shown as separate lines. •Sum of components may not equal total due to rounding.

Sources: See end of Section 2.

Table 2.3 Oil Stocks, End of Period  
(Million Barrels)

	1994	1995	1996	1997				1998			
	Year End		Quarter				Quarter				
			First	Second	Third	Fourth	First	Second	Third	Fourth	
<b>OECD</b>											
United States <sup>1/</sup>											
Commercial.....	1,061	971	941	949	1,012	1,029	997	1,025	1,091	1,090	1,076
Strategic.....	592	592	566	563	563	563	563	563	563	563	571
U. S. Territories.....	26	24	25	23	27	27	23	25	28	29	22
Canada.....	119	109	103	107	107	108	115	118	116	120	118
Japan.....	645	630	651	650	662	682	685	655	658	676	649
OECD Europe											
France.....	158	159	158	160	153	157	164	155	164	170	161
Germany.....	312	301	300	312	299	291	298	285	308	317	321
Italy.....	164	162	152	160	151	144	147	146	164	158	153
United Kingdom.....	115	107	108	109	111	106	105	109	109	107	108
Other OECD Europe....	490	499	537	532	516	528	542	560	572	584	573
Total.....	1,240	1,228	1,256	1,273	1,230	1,227	1,256	1,254	1,316	1,335	1,317
Australia & New Zealand	43	47	49	53	56	50	51	48	54	50	44
Total OECD.....	3,726	3,601	3,591	3,617	3,657	3,687	3,689	3,688	3,826	3,863	3,797
Stocks for Export											
and Afloat <sup>2/</sup> .....	935	980	985	1,010	985	1,030	1,030	1,070	1,050	1,030	1,035
Commercial Floating <sup>3/</sup> ....	70	70	70	70	70	70	70	80	90	110	100

<sup>1/</sup> U.S. stock data include Alaskan crude oil in transit by water. These data were previously reported in stocks for export and afloat. U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> Stocks held at export terminals of major crude oil producing countries and commercial oil afloat based on quarterly analysis of world seaborne movements.

<sup>3/</sup> Stocks stored by industry in tankers moored offshore. Excludes strategic storage.

Notes: •Oil Stocks - See Note 2 in Appendix B. •Sum of components may not equal total due to rounding.

Sources: See end of Section 2.

**Table 2.4 World Oil Demand, 1994-1998**  
 (Million Barrels Per Day)

	1994	1995	1996	1997						1998						
	Annual			Quarter				Annual			Quarter				Annual	
	Average	First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average
<b>OECD</b>																
United States <sup>1</sup> /.....	17.72	17.72	18.31	18.27	18.49	18.75	18.97	18.62	18.32	18.43	19.03	18.94	18.68			
U. S. Territories.....	.26	.25	.26	.29	.28	.27	.28	.28	.30	.26	.27	.29	.28			
Canada.....	1.73	1.76	1.80	1.81	1.81	1.93	1.88	1.86	1.85	1.82	1.93	1.92	1.88			
Japan.....	5.67	5.71	5.87	6.39	5.17	5.43	5.87	5.71	6.15	4.97	5.23	5.69	5.51			
OECD Europe <sup>2</sup> /																
France.....	1.83	1.90	1.93	2.03	1.83	1.96	2.00	1.96	2.06	1.94	2.00	2.08	2.02			
Italy.....	1.84	2.05	2.06	2.02	1.94	1.99	2.23	2.04	2.10	2.00	2.00	2.15	2.06			
United Kingdom.....	1.84	1.84	1.85	1.84	1.76	1.76	1.83	1.80	1.84	1.73	1.78	1.82	1.79			
Germany <sup>3</sup> /.....	2.88	2.88	2.91	2.75	3.03	2.99	2.84	2.90	2.95	2.79	2.96	2.94	2.91			
Other OECD Europe....	5.21	5.45	5.52	5.65	5.62	5.71	5.93	5.73	5.94	5.72	5.87	6.11	5.91			
Total OECD Europe....	13.60	14.12	14.27	14.29	14.19	14.42	14.82	14.43	14.87	14.18	14.60	15.11	14.69			
Australia & New Zealand	.92	.99	.93	.95	.94	.96	.94	.95	.94	.96	.93	.97	.95			
Total OECD.....	39.89	40.55	41.43	42.00	40.88	41.74	42.77	41.85	42.43	40.61	42.00	42.92	41.99			
<b>Non-OECD</b>																
China.....	3.14	3.33	3.55	3.71	3.77	3.81	3.86	3.79	3.90	3.96	4.00	4.06	3.98			
Former USSR.....	4.85	4.62	4.38	4.51	4.06	4.06	4.42	4.26	4.54	4.09	4.09	4.45	4.29			
Other Non-OECD.....	20.43	21.43	22.16	23.04	22.90	22.46	24.02	23.11	23.52	23.37	22.93	24.50	23.58			
Total Non-OECD.....	28.42	29.38	30.09	31.27	30.73	30.33	32.30	31.16	31.97	31.42	31.02	33.01	31.85			
Total World Demand.....	68.31	69.93	71.52	73.27	71.61	72.07	75.07	73.01	74.40	72.04	73.02	75.93	73.85			

<sup>1</sup>/ U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2</sup>/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3</sup>/ Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Oil demand includes bunkers and refinery fuel. The term Demand is used interchangeably with the terms Consumption and Petroleum Products Supplied. See Appendix C for definition. •Sum of components may not equal total due to rounding.

Sources: See end of Section 2.

## Sources for Section 2 (International Oil Balance Data)

Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1997 and Petroleum Supply Monthly, April 1999.

Other Countries: Annual data -- EIA, International Energy Annual, various issues. Monthly data -- Canada -- Maclean Hunter Publishing Company, Oilweek, various issues. Denmark, Mexico, Netherlands, Norway, Germany, and all OPEC countries -- Petroleum and Energy Intelligence Weekly, Inc., Petroleum Intelligence Weekly, various issues. Other Countries -- PennWell Publishing Company, Oil and Gas Journal, various issues. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, December 1986.

Oil Stocks

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, April 1999.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1990-1999. Stocks for Export and Afloat and Commercial Floating Stocks -- Petroleum Economics Limited, Oil Industry Developments, various issues.

Oil Demand

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, April 1999.

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1990-1999.

OPEC Countries: EIA, International Energy Annual, various issues and Short-Term Energy Outlook, various issues.

Other countries: EIA, International Energy Annual, various issues and Short-Term Energy Outlook, various issues.



### **3. International Oil Imports**

Table 3.1 Average Net Oil Imports into OECD Countries, (1998 Average)  
(Million Barrels per Day)

	OECD Europe							OECD Outside Europe			
	Total	United Kingdom	France	Germany <sup>1/</sup>	Italy	Other Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada			
									Japan	Other <sup>4/</sup>	
Total Net Imports..	22.435	7.919	-0.969	1.878	2.888	1.831	2.290	9.452	-0.900	5.406	0.558
Imports from OPEC <sup>5/</sup>	16.938	6.697	.212	1.029	.656	1.421	3.378	4.789	.294	4.467	.690
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.516	3.953	.107	.730	.163	.658	2.296	2.091	.097	4.132	.243
Bahrain.....	.021	.004	.000	.002	.000	.002	.000	.000	-	.016	.002
Iran.....	1.482	1.006	.009	.157	.020	.273	.547	.000	.000	.473	.003
Iraq.....	1.116	.733	-	.171	.020	.108	.435	.334	.014	.017	.018
Kuwait.....	1.070	.275	.025	.019	.016	.000	.215	.281	.000	.507	.006
U.A.E.....	1.473	.020	.001	.012	.000	.000	.007	.000	-	1.402	.051
Qatar.....	.468	.000	.000	.000	.000	.000	.000	.004	-	.450	.014
Saudi Arabia.....	4.887	1.915	.073	.369	.106	.274	1.093	1.472	.084	1.268	.149
Imports from OPEC-Africa											
Total.....	3.744	2.512	.077	.301	.447	.723	.963	.971	.094	.025	.143
Algeria.....	1.078	.711	.021	.115	.127	.083	.365	.288	.071	.012	-.004
Libya.....	1.296	1.296	.046	.061	.277	.601	.311	.000	-	-	.000
Nigeria.....	1.371	.505	.011	.126	.043	.039	.287	.683	.023	.013	.147
Imports from OPEC-South America											
Total.....	2.139	.213	.028	.000	.046	.020	.119	1.671	.103	.000	.152
Venezuela.....	2.139	.213	.028	.000	.046	.020	.119	1.671	.103	.000	.152
Imports from OPEC-Far East											
Total.....	.560	.024	-	.000	.000	.023	.000	.056	.000	.326	.154
Indonesia.....	.560	.024	-	.000	.000	.023	.000	.056	.000	.326	.154

<sup>1/</sup> The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

<sup>2/</sup> "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

<sup>3/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>4/</sup> "Other" consists of Australia, New Zealand, and U. S. Territories.

<sup>5/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>6/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.2 Net Oil Imports into OECD Countries, (4th Quarter 1998)  
(Million Barrels per Day)

	OECD Europe							OECD Outside Europe			
	Total	United Kingdom	France	Germany <sup>1/</sup>	Italy	Other Europe <sup>2/</sup>	United States <sup>3/</sup> Canada	Japan		Other <sup>4/</sup>	
								Total			
Total Net Imports..	22.531	7.899	-1.025	1.876	2.903	1.863	2.283	9.518	-0.904	5.436	0.582
Imports from OPEC <sup>5/</sup>	16.922	6.717	.186	.975	.712	1.443	3.401	4.765	.275	4.460	.705
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.523	3.945	.080	.657	.184	.733	2.290	2.139	.108	4.114	.218
Bahrain.....	.022	.000	.000	.000	.000	.000	.000	.000	-	.022	.000
Iran.....	1.481	.943	.000	.135	.025	.327	.456	.000	.000	.538	.000
Iraq.....	1.514	.833	-	.140	.040	.117	.536	.559	.032	.045	.045
Kuwait.....	1.036	.297	.011	.001	.012	.000	.272	.227	.002	.505	.005
U.A.E.....	1.457	.028	.000	.020	.000	.000	.008	-.004	-	1.395	.038
Qatar.....	.403	.000	.000	.000	.000	.000	.000	.000	-	.403	.000
Saudi Arabia.....	4.610	1.843	.069	.361	.107	.289	1.018	1.357	.074	1.206	.130
Imports from OPEC-Africa											
Total.....	3.600	2.539	.080	.319	.484	.686	.971	.800	.085	.041	.135
Algeria.....	1.106	.784	.039	.140	.159	.079	.367	.236	.075	.011	.000
Libya.....	1.290	1.290	.041	.075	.280	.567	.327	.000	-	-	.000
Nigeria.....	1.204	.466	.000	.104	.045	.040	.277	.564	.010	.030	.134
Imports from OPEC-South America											
Total.....	2.196	.229	.026	.000	.044	.020	.139	1.734	.082	.000	.151
Venezuela.....	2.196	.229	.026	.000	.044	.020	.139	1.734	.082	.000	.151
Imports from OPEC-Far East											
Total.....	.625	.004	-	.000	.000	.004	.001	.092	.000	.327	.202
Indonesia.....	.625	.004	-	.000	.000	.004	.001	.092	.000	.327	.202

1/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

3/ U.S. geographic coverage is the 50 States and District of Columbia.

4/ "Other" consists of Australia, New Zealand, and U. S. Territories.

5/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

6/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.3 Net Oil Imports into OECD Countries, (3rd Quarter 1998)  
 (Million Barrels per Day)

	OECD Europe							OECD Outside Europe			
	Total		United Kingdom	France	Germany <sup>1/</sup>	Italy	Other Europe <sup>2/</sup>	United States <sup>3/</sup> Canada		Japan	Other <sup>4/</sup>
	Total	United Kingdom						United States <sup>3/</sup>	Canada		
Total Net Imports..	23.222	8.214	-0.891	1.918	2.969	1.717	2.501	9.881	-0.803	5.396	0.535
Imports from OPEC <sup>5/</sup>	17.331	6.843	.215	1.130	.678	1.397	3.423	5.084	.300	4.452	.652
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.924	4.131	.103	.787	.175	.681	2.384	2.399	.106	4.052	.236
Bahrain.....	.015	.004	.000	.004	.000	.000	.000	.000	-	.012	.000
Iran.....	1.629	1.132	.011	.170	.031	.268	.652	.000	.000	.494	.002
Iraq.....	1.491	.949	-	.238	.014	.163	.533	.502	.000	.024	.016
Kuwait.....	1.061	.265	.022	.021	.017	.000	.205	.323	.000	.467	.005
U.A.E.....	1.437	.009	.000	.000	.000	.000	.009	-.002	-	1.382	.047
Qatar.....	.489	.000	.000	.000	.000	.000	.000	.005	-	.469	.015
Saudi Arabia.....	4.802	1.771	.070	.354	.113	.251	.984	1.570	.106	1.204	.151
Imports from OPEC-Africa											
Total.....	3.730	2.509	.085	.345	.456	.699	.923	.998	.082	.034	.106
Algeria.....	1.061	.694	.021	.116	.119	.090	.347	.293	.064	.014	-.003
Libya.....	1.300	1.300	.052	.057	.305	.582	.303	.000	-	-	.000
Nigeria.....	1.369	.515	.011	.172	.033	.027	.273	.706	.019	.020	.110
Imports from OPEC-South America											
Total.....	2.060	.192	.026	.000	.047	.003	.116	1.612	.111	.000	.144
Venezuela.....	2.060	.192	.026	.000	.047	.003	.116	1.612	.111	.000	.144
Imports from OPEC-Far East											
Total.....	.633	.014	-	.000	.000	.014	.000	.076	.000	.377	.166
Indonesia.....	.633	.014	-	.000	.000	.014	.000	.076	.000	.377	.166

<sup>1/</sup> The data for Germany are for unified Germany, i.e., the former East Germany and West Germany.

<sup>2/</sup> "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

<sup>3/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>4/</sup> "Other" consists of Australia, New Zealand, and U. S. Territories.

<sup>5/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>6/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.4 OECD Total Net Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1998											1999
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan
Total.....	21.580	21.653	21.855	23.830	21.321	23.022	24.076	22.548	22.826	22.691	22.082	24.108
United States <sup>1/</sup> .....	8.620	8.775	9.369	9.876	9.715	10.152	10.049	9.426	9.680	9.792	9.091	9.285
Canada.....	-1.052	-.785	-.930	-.911	-.977	-.877	-.777	-.753	-.867	-.861	-.982	-.737
OECD Europe <sup>2/</sup> .....	7.814	7.173	7.873	9.119	7.314	7.706	8.862	8.070	8.259	7.746	7.687	9.098
Main European Importers												
France.....	2.034	1.682	2.116	1.980	1.618	1.965	1.875	1.915	1.838	1.923	1.867	2.077
Germany <sup>3/</sup> .....	2.601	2.938	2.920	3.034	2.894	3.140	2.909	2.855	2.904	2.845	2.957	2.792
Italy.....	1.886	1.693	2.080	1.810	1.803	1.563	1.902	1.684	1.901	1.885	1.805	2.067
Spain.....	1.329	1.330	1.397	1.428	1.254	1.332	1.355	1.398	1.341	1.394	1.587	1.425
Netherlands.....	.916	.757	.719	.887	.820	.694	.862	.724	.848	.727	.610	1.026
European Net Exporters												
Norway.....	-2.972	-3.528	-3.284	-2.701	-3.270	-3.063	-2.445	-2.939	-2.806	-2.974	-3.088	-2.827
United Kingdom.....	-1.069	-.999	-1.264	-.631	-.803	-.852	-.914	-.908	-.962	-1.167	-.951	-1.046
Smaller European Importers												
Austria.....	.215	.236	.244	.243	.249	.250	.226	.245	.222	.238	.217	.229
Belgium.....	.604	.620	.637	.596	.594	.557	.612	.617	.603	.595	.641	.693
Denmark.....	.030	-.036	.055	.043	.003	-.035	.007	.019	-.025	-.008	-.033	.003
Ireland.....	.152	.164	.134	.156	.123	.164	.138	.138	.142	.179	.147	.167
Finland.....	.178	.157	.146	.307	.152	.198	.227	.256	.277	.184	.166	.307
Greece.....	.403	.467	.461	.276	.385	.247	.430	.427	.364	.299	.374	.435
Iceland.....	.010	.017	.011	.018	.005	.033	.015	.021	.017	.021	.009	.018
Luxembourg.....	.044	.044	.043	.039	.038	.047	.037	.044	.045	.042	.050	.041
Portugal.....	.374	.314	.290	.354	.344	.292	.368	.317	.332	.360	.215	.409
Sweden.....	.221	.433	.440	.444	.351	.331	.355	.366	.388	.382	.336	.418
Switzerland.....	.283	.286	.283	.285	.311	.296	.258	.255	.271	.237	.275	.258
Turkey.....	.574	.602	.446	.551	.443	.548	.646	.635	.557	.583	.502	.606
Japan.....	5.857	5.760	5.160	5.142	4.748	5.420	5.456	5.309	5.306	5.297	5.702	5.777
Other OECD.....	.341	.731	.383	.605	.521	.621	.486	.495	.449	.716	.584	.684

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.5 OECD Imports from OPEC (Most Recent 12 Months)  
(Million Barrels per Day)

	1998											1999
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan
Total.....	16.632	16.862	16.542	17.374	16.592	17.554	17.807	16.610	17.029	16.846	16.889	17.038
United States <sup>1/</sup> ....	4.235	4.712	4.756	5.029	4.869	5.305	5.208	4.728	5.044	4.777	4.474	4.713
Canada.....	.289	.269	.304	.365	.356	.292	.333	.273	.312	.302	.212	.419
OECD Europe <sup>2/</sup> ....	6.835	6.245	6.624	6.886	6.726	6.802	7.106	6.613	6.688	6.739	6.725	6.682
Main European Importers												
France.....	1.071	.881	1.171	1.092	.945	1.098	1.177	1.113	.840	.976	1.109	.985
Germany <sup>3/</sup> .....	.595	.571	.601	.732	.595	.722	.690	.620	.701	.668	.765	.699
Italy.....	1.624	1.228	1.518	1.429	1.423	1.437	1.490	1.260	1.525	1.494	1.311	1.560
Spain.....	.917	.872	.868	.811	.826	.870	.881	.789	.928	.870	.904	.879
Netherlands.....	.896	.854	.643	.761	.920	.757	.884	.988	.896	.828	.934	.716
European Net Exporters												
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom....	.140	.293	.156	.280	.294	.304	.167	.171	.160	.211	.189	.152
Smaller European Importers												
Austria.....	.132	.130	.150	.133	.124	.103	.125	.141	.149	.149	.147	.088
Belgium.....	.276	.257	.326	.381	.424	.319	.426	.348	.354	.309	.336	.338
Denmark.....	.027	.024	.033	.068	.003	.031	.040	.032	.048	.033	.032	.031
Finland.....	.000	.010	.000	.006	.009	.018	.000	.000	.001	.000	.001	.000
Greece.....	.351	.343	.416	.288	.358	.326	.349	.431	.278	.322	.336	.401
Portugal.....	.248	.154	.153	.225	.178	.231	.214	.145	.157	.225	.099	.150
Sweden.....	.006	.108	.167	.126	.151	.118	.103	.024	.091	.091	.058	.158
Switzerland.....	.108	.082	.102	.098	.107	.111	.106	.097	.113	.093	.109	.095
Turkey.....	.445	.437	.320	.457	.368	.356	.453	.452	.445	.470	.394	.430
Japan.....	4.589	4.902	4.277	4.367	3.992	4.440	4.532	4.383	4.358	4.344	4.675	4.573
Other OECD.....	.683	.734	.581	.727	.649	.715	.628	.612	.627	.684	.803	.651

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development; OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups. •Negative numbers represent net exports. •A dash (-) indicates no trade.

•Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.6 OECD Imports from Persian Gulf (Most Recent 12 Months)  
(Million Barrels per Day)

	1998											1999	
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Total.....	10.237	10.232	10.392	10.802	10.161	10.894	11.129	10.743	10.311	10.766	10.499	10.339	
United States <sup>1/</sup> ....	1.709	1.950	1.979	1.902	2.184	2.331	2.482	2.382	2.154	2.149	2.114	2.111	
Canada.....	.074	.067	.070	.139	.170	.107	.185	.024	.140	.151	.034	.165	
OECD Europe <sup>2/</sup> ....	3.848	3.427	4.091	4.427	3.933	4.159	4.157	4.075	3.821	4.158	3.862	3.680	
Main European Importers													
France.....	.769	.513	.851	.913	.712	.824	.734	.805	.571	.706	.694	.718	
Germany <sup>3/</sup> .....	.124	.115	.178	.202	.150	.193	.154	.177	.206	.141	.204	.171	
Italy.....	.686	.446	.688	.740	.619	.714	.694	.635	.778	.764	.658	.616	
Spain.....	.394	.370	.471	.487	.387	.502	.454	.324	.367	.458	.404	.390	
Netherlands.....	.702	.679	.496	.601	.729	.602	.747	.825	.696	.685	.785	.527	
European Net Exporters													
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
United Kingdom....	.060	.180	.102	.177	.135	.139	.082	.089	.056	.123	.064	.082	
Smaller European Importers													
Austria.....	.052	.069	.057	.089	.035	.044	.023	.054	.058	.070	.041	.008	
Belgium.....	.251	.239	.311	.353	.359	.294	.373	.316	.289	.267	.307	.326	
Denmark.....	.000	.000	.008	.021	.003	.000	.015	.013	.024	.001	.000	.000	
Finland.....	.000	.000	.000	.000	.000	.018	.000	.000	.000	.000	.000	.000	
Greece.....	.301	.311	.399	.254	.330	.311	.300	.395	.275	.320	.302	.369	
Portugal.....	.173	.136	.121	.151	.102	.195	.157	.114	.096	.194	.099	.084	
Sweden.....	.000	.072	.136	.081	.106	.068	.062	.000	.063	.070	.058	.131	
Switzerland.....	.000	.009	.017	.017	.010	.018	.013	.006	.010	.005	.000	.000	
Turkey.....	.336	.289	.257	.341	.256	.238	.349	.322	.332	.353	.245	.257	
Japan.....	4.312	4.545	4.032	4.084	3.659	4.073	4.067	4.015	4.030	3.985	4.322	4.163	
Other OECD.....	.294	.242	.220	.250	.215	.224	.238	.247	.166	.323	.167	.220	

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

**Table 3.7 United States--Net Oil Imports (Most Recent 12 Months)**  
 (Million Barrels per Day)

	1998											1999	
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Total Net Imports..	8.620	8.775	9.369	9.876	9.715	10.152	10.049	9.426	9.680	9.792	9.091	9.285	
Imports from OPEC <sup>1</sup> /	4.235	4.712	4.756	5.029	4.869	5.305	5.208	4.728	5.044	4.777	4.474	4.713	
Imports from Persian Gulf <sup>2</sup> /													
Total.....	1.709	1.950	1.979	1.902	2.184	2.331	2.482	2.382	2.154	2.149	2.114	2.111	
Bahrain.....	-.004	-.003	-.003	.017	-.003	.000	.000	.000	.000	.000	.000	.000	
Iran.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Iraq.....	.000	.127	.233	.137	.270	.277	.713	.517	.647	.542	.486	.471	
Kuwait.....	.283	.307	.262	.399	.275	.435	.273	.259	.230	.224	.228	.132	
U.A.E.....	-.003	.011	.017	-.003	-.003	-.003	-.002	.000	-.006	-.003	-.002	-.003	
Qatar.....	.018	.000	.000	.000	.015	.015	.000	.000	.000	.000	.000	.000	
Saudi Arabia.....	1.415	1.508	1.470	1.352	1.630	1.607	1.498	1.606	1.283	1.386	1.402	1.511	
Imports from OPEC-Africa													
Total.....	.807	1.056	1.108	1.229	1.132	1.180	1.000	.808	.917	.793	.690	.919	
Algeria.....	.295	.244	.336	.330	.362	.308	.264	.306	.289	.219	.200	.240	
Libya.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Nigeria.....	.512	.812	.772	.899	.770	.872	.736	.502	.628	.574	.490	.679	
Imports from OPEC-South America													
Total.....	1.694	1.653	1.622	1.894	1.551	1.698	1.668	1.465	1.890	1.670	1.639	1.604	
Venezuela.....	1.694	1.653	1.622	1.894	1.551	1.698	1.668	1.465	1.890	1.670	1.639	1.604	
Imports from OPEC-Far East													
Total.....	.021	.050	.044	.021	-.001	.096	.058	.073	.083	.165	.031	.079	
Indonesia.....	.021	.050	.044	.021	-.001	.096	.058	.073	.083	.165	.031	.079	

<sup>1</sup>/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2</sup>/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •U.S. geographic coverage is the 50 States and District of Columbia. •Negative numbers represent net exports. •A dash (-) indicates no trade.

•Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

**Table 3.8 Japan--Net Oil Imports (Most Recent 12 Months)**  
 (Million Barrels per Day)

	1998											1999	
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Total Net Imports..	5.857	5.760	5.160	5.142	4.748	5.420	5.456	5.309	5.306	5.297	5.702	5.777	
Imports from OPEC <sup>1</sup> /	4.589	4.902	4.277	4.367	3.992	4.440	4.532	4.383	4.358	4.344	4.675	4.573	
Imports from Persian Gulf <sup>2</sup> /													
Total.....	4.312	4.545	4.032	4.084	3.659	4.073	4.067	4.015	4.030	3.985	4.322	4.163	
Bahrain.....	.017	.000	.013	.012	.017	.008	.016	.010	.028	.022	.015	.020	
Iran.....	.453	.532	.282	.302	.454	.424	.581	.477	.432	.416	.761	.418	
Iraq.....	.000	.000	.000	.000	.000	.000	.000	.073	.103	.032	.000	.000	
Kuwait.....	.578	.611	.437	.531	.421	.443	.478	.482	.501	.505	.510	.492	
U.A.E.....	1.507	1.336	1.606	1.341	1.161	1.459	1.338	1.349	1.395	1.297	1.488	1.502	
Qatar.....	.438	.571	.482	.487	.334	.474	.504	.428	.387	.462	.361	.457	
Saudi Arabia.....	1.318	1.496	1.211	1.409	1.272	1.265	1.149	1.196	1.184	1.250	1.185	1.273	
Imports from OPEC-Africa													
Total.....	.017	.000	.019	.000	.034	.017	.041	.045	.096	.028	.000	.138	
Algeria.....	.017	.000	.019	.000	.034	.017	.000	.025	.006	.028	.000	.050	
Nigeria.....	.000	.000	.000	.000	.000	.000	.041	.020	.090	.000	.000	.088	
Imports from OPEC-South America													
Total.....	.000	.000	.000	.000	.000	.001	.001	.000	.000	.000	.000	.000	
Venezuela.....	.000	.000	.000	.000	.000	.001	.001	.000	.000	.000	.000	.000	
Imports from OPEC-Far East													
Total.....	.278	.356	.239	.295	.316	.357	.439	.334	.260	.353	.369	.292	
Indonesia.....	.278	.356	.239	.295	.316	.357	.439	.334	.260	.353	.369	.292	

<sup>1</sup>/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2</sup>/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis.

•Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

**Table 3.9 OECD Europe--Net Oil Imports (Most Recent 12 Months)**  
 (Million Barrels per Day)

	1998											1999
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan
Total Net Imports..	7.814	7.173	7.873	9.119	7.314	7.706	8.862	8.070	8.259	7.746	7.687	9.098
Imports from OPEC <sup>1</sup> /	6.835	6.245	6.624	6.886	6.726	6.802	7.106	6.613	6.688	6.739	6.725	6.682
Imports from Persian Gulf <sup>2</sup> /												
Total.....	3.848	3.427	4.091	4.427	3.933	4.159	4.157	4.075	3.821	4.158	3.862	3.680
Bahrain.....	.034	.000	.000	.000	.000	.000	.001	.011	.001	.000	.000	.000
Iran.....	.889	.861	.958	1.173	1.151	1.250	1.089	1.056	.985	1.034	.814	.962
Iraq.....	.520	.562	.835	.837	.451	.884	1.057	.904	.771	.791	.935	.606
Kuwait.....	.332	.364	.151	.272	.297	.145	.265	.391	.306	.186	.396	.237
U.A.E.....	.005	.000	.042	.009	.070	.022	.000	.004	.000	.000	.084	.000
Qatar.....	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	2.070	1.640	2.105	2.136	1.965	1.857	1.746	1.709	1.758	2.147	1.634	1.875
Imports from OPEC-Africa												
Total.....	2.766	2.566	2.341	2.161	2.453	2.440	2.729	2.354	2.559	2.337	2.716	2.851
Algeria.....	.590	.836	.535	.598	.623	.675	.699	.709	.739	.782	.831	.920
Libya.....	1.339	1.256	1.379	1.307	1.290	1.329	1.354	1.214	1.264	1.221	1.382	1.328
Nigeria.....	.838	.474	.427	.256	.541	.436	.676	.432	.556	.334	.503	.602
Imports from OPEC-South America												
Total.....	.192	.198	.154	.277	.313	.180	.202	.195	.305	.236	.146	.151
Venezuela.....	.192	.198	.154	.277	.313	.180	.202	.195	.305	.236	.146	.151
Imports from OPEC-Far East												
Total.....	.063	.054	.037	.021	.026	.024	.018	.000	.004	.008	.001	.000
Indonesia.....	.063	.054	.037	.021	.026	.024	.018	.000	.004	.008	.001	.000

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •"OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•See Section 4 for annual data.

Sources: See end of Section 3.

**Table 3.10 France--Net Oil Imports (Most Recent 12 Months)**  
 (Million Barrels per Day)

	1998											1999	
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Total Net Imports..	2.034	1.682	2.116	1.980	1.618	1.965	1.875	1.915	1.838	1.923	1.867	2.077	
Imports from OPEC <sup>1/</sup>	1.071	.881	1.171	1.092	.945	1.098	1.177	1.113	.840	.976	1.109	.985	
Imports from Persian Gulf <sup>2/</sup>													
Total.....	.769	.513	.851	.913	.712	.824	.734	.805	.571	.706	.694	.718	
Bahrain.....	.012	.000	.000	.000	.000	.000	.001	.011	.001	.000	.000	.000	
Iran.....	.142	.159	.099	.229	.164	.261	.148	.100	.118	.155	.132	.097	
Iraq.....	.073	.062	.294	.193	.167	.214	.247	.254	.125	.104	.189	.274	
Kuwait.....	.093	.006	.000	.066	.000	.000	.000	.065	.003	.000	.000	.029	
U.A.E.....	.005	.000	.016	.000	.061	.000	.000	.000	.000	.000	.059	.000	
Qatar.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Saudi Arabia.....	.444	.287	.442	.424	.321	.349	.339	.375	.324	.447	.313	.319	
Imports from OPEC-Africa													
Total.....	.313	.368	.320	.178	.232	.274	.443	.319	.269	.269	.416	.267	
Algeria.....	.053	.191	.120	.062	.048	.093	.137	.120	.124	.174	.122	.146	
Libya.....	.062	.059	.103	.085	.020	.047	.061	.063	.025	.060	.141	.026	
Nigeria.....	.197	.118	.096	.031	.164	.134	.245	.136	.121	.035	.153	.095	
Imports from OPEC-South America													
Total.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
Venezuela.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
Imports from OPEC-Far East													
Total.....	.000	.000	.000	.001	.001	.001	.001	.000	.001	.000	.000	.000	
Indonesia.....	.000	.000	.000	.001	.001	.001	.001	.000	.001	.000	.000	.000	

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.11 Germany--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1998											1999	
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Total Net Imports..	2.601	2.938	2.920	3.034	2.894	3.140	2.909	2.855	2.904	2.845	2.957	2.792	
Imports from OPEC <sup>1/</sup>	.595	.571	.601	.732	.595	.722	.690	.620	.701	.668	.765	.699	
Imports from Persian Gulf <sup>2/</sup>													
Total.....	.124	.115	.178	.202	.150	.193	.154	.177	.206	.141	.204	.171	
Bahrain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
Iran.....	.000	.027	.014	.017	.011	.045	.021	.026	.046	.020	.010	.000	
Iraq.....	.000	.000	.034	.027	.013	.018	.011	.014	.023	.018	.078	.085	
Kuwait.....	.020	.016	.021	.024	.027	.014	.014	.022	.016	.005	.016	.010	
U.A.E.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Qatar.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
Saudi Arabia.....	.104	.072	.109	.135	.099	.116	.109	.115	.122	.098	.100	.076	
Imports from OPEC-Africa													
Total.....	.439	.410	.368	.429	.402	.479	.483	.405	.403	.519	.531	.514	
Algeria.....	.091	.150	.050	.139	.131	.120	.158	.077	.097	.214	.169	.122	
Libya.....	.288	.252	.275	.260	.256	.333	.290	.292	.287	.240	.311	.333	
Nigeria.....	.059	.008	.043	.030	.015	.026	.035	.037	.019	.065	.050	.059	
Imports from OPEC-South America													
Total.....	.032	.046	.055	.100	.044	.050	.053	.038	.092	.008	.030	.015	
Venezuela.....	.032	.046	.055	.100	.044	.050	.053	.038	.092	.008	.030	.015	
Imports from OPEC-Far East													
Total.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Indonesia.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.12 Italy--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1998											1999	
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Total Net Imports..	1.886	1.693	2.080	1.810	1.803	1.563	1.902	1.684	1.901	1.885	1.805	2.067	
Imports from OPEC <sup>1/</sup>	1.624	1.228	1.518	1.429	1.423	1.437	1.490	1.260	1.525	1.494	1.311	1.560	
Imports from Persian Gulf <sup>2/</sup>													
Total.....	.686	.446	.688	.740	.619	.714	.694	.635	.778	.764	.658	.616	
Bahrain.....	.022	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Iran.....	.195	.197	.252	.333	.329	.273	.256	.276	.394	.279	.306	.332	
Iraq.....	.067	.068	.108	.133	.075	.149	.153	.187	.130	.123	.099	.082	
Kuwait.....	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
U.A.E.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Qatar.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
Saudi Arabia.....	.397	.181	.328	.273	.216	.293	.285	.171	.254	.362	.253	.203	
Imports from OPEC-Africa													
Total.....	.878	.719	.778	.662	.711	.700	.778	.617	.737	.678	.642	.936	
Algeria.....	.086	.057	.080	.048	.076	.091	.100	.079	.072	.062	.102	.185	
Libya.....	.617	.629	.698	.607	.626	.567	.647	.530	.618	.578	.505	.627	
Nigeria.....	.175	.032	.000	.006	.010	.042	.031	.007	.047	.038	.035	.124	
Imports from OPEC-South America													
Total.....	.020	.010	.016	.007	.067	.000	.000	.009	.007	.044	.011	.007	
Venezuela.....	.020	.010	.016	.007	.067	.000	.000	.009	.007	.044	.011	.007	
Imports from OPEC-Far East													
Total.....	.062	.054	.037	.020	.025	.023	.018	.000	.003	.007	.000	.000	
Indonesia.....	.062	.054	.037	.020	.025	.023	.018	.000	.003	.007	.000	.000	

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.13 OECD Imports from Iraq (Most Recent 12 Months)  
 (Million Barrels per Day)

	1998											1999
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan
Total.....	0.520	0.693	1.076	1.029	0.744	1.170	1.793	1.510	1.604	1.437	1.498	1.124
United States <sup>1/</sup> .....	.000	.127	.233	.137	.270	.277	.713	.517	.647	.542	.486	.471
Canada.....	.000	.000	.000	.050	.014	.000	.000	.000	.062	.000	.034	.032
OECD Europe <sup>2/</sup> .....	.520	.562	.835	.837	.451	.884	1.057	.904	.771	.791	.935	.606
<b>Main European Importers</b>												
France.....	.073	.062	.294	.193	.167	.214	.247	.254	.125	.104	.189	.274
Germany <sup>3/</sup> .....	.000	.000	.034	.027	.013	.018	.011	.014	.023	.018	.078	.085
Italy.....	.067	.068	.108	.133	.075	.149	.153	.187	.130	.123	.099	.082
Spain.....	.111	.129	.102	.099	.097	.223	.195	.097	.125	.165	.134	.129
Netherlands.....	.128	.088	.129	.168	.015	.082	.143	.136	.162	.112	.197	.000
<b>Smaller European Importers</b>												
Austria.....	.022	.043	.044	.037	.013	.022	.000	.046	.017	.066	.019	.000
Belgium.....	.014	.049	.050	.005	.000	.076	.127	.083	.041	.055	.055	.000
Greece.....	.000	.016	.000	.030	.000	.000	.032	.011	.011	.011	.045	.032
Portugal.....	.037	.053	.000	.032	.032	.065	.030	.000	.000	.030	.064	.000
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.067	.055	.074	.112	.040	.036	.118	.075	.136	.105	.056	.004
Japan.....	.000	.000	.000	.000	.000	.000	.000	.073	.103	.032	.000	.000
Other OECD.....	.000	.005	.008	.004	.009	.009	.023	.017	.021	.072	.044	.015

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and Germany.

<sup>3/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.14 OECD Imports from Kuwait (Most Recent 12 Months)  
(Million Barrels per Day)

	1998											1999	
	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Total.....	1.207	1.293	0.862	1.205	0.996	1.026	1.018	1.142	1.037	0.932	1.136	0.862	
United States <sup>1/</sup> .....	.283	.307	.262	.399	.275	.435	.273	.259	.230	.224	.228	.132	
Canada.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005	.000	.000	
OECD Europe <sup>2/</sup> .....	.332	.364	.151	.272	.297	.145	.265	.391	.306	.186	.396	.237	
<b>Main European Importers</b>													
France.....	.093	.006	.000	.066	.000	.000	.000	.065	.003	.000	.000	.029	
Germany <sup>3/</sup> .....	.020	.016	.021	.024	.027	.014	.014	.022	.016	.005	.016	.010	
Italy.....	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Spain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.000	
Netherlands.....	.194	.253	.102	.082	.199	.082	.209	.205	.199	.106	.301	.183	
<b>European Net Exporters</b>													
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
United Kingdom.....	.002	.070	.008	.064	.048	.031	.020	.015	.006	.028	.000	.000	
<b>Smaller European Importers</b>													
Belgium.....	.000	.000	.000	.000	.000	.000	.000	.031	.045	.029	.059	.000	
Denmark.....	.000	.000	.008	.021	.003	.000	.015	.012	.022	.001	.000	.000	
Finland.....	.000	.000	.000	.000	.000	.018	.000	.000	.000	.000	.000	.000	
Greece.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
Sweden.....	.000	.004	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	
Turkey.....	.017	.015	.011	.015	.020	.000	.008	.040	.015	.016	.016	.015	
Japan.....	.578	.611	.437	.531	.421	.443	.478	.482	.501	.505	.510	.492	
Other OECD.....	.014	.012	.011	.003	.002	.003	.002	.011	.001	.011	.002	.001	

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and Germany.

3/ Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

## **Sources for Section 3 (International Oil Imports)**

### **Oil Imports**

United States: • Energy Information Administration (EIA), Petroleum Supply Annual 1997 and Petroleum Supply Monthly, April 1999. Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1991-1999.

## **4. Historical Oil Data Series**

**1970-1998**

**Table 4.1a World Crude Oil Production (Including Lease Condensate), 1970-1998**  
 (Thousands Barrels per Day)

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1970 Average.....	1,029	854	3,829	1,549	2,990	3,318	1,083	362	3,799	780	3,708	23,301
1971 Average.....	785	892	4,540	1,694	3,197	2,761	1,531	431	4,769	1,060	3,549	25,209
1972 Average.....	1,062	1,081	5,023	1,466	3,283	2,239	1,816	482	6,016	1,203	3,220	26,891
1973 Average.....	1,097	1,339	5,861	2,018	3,020	2,175	2,054	570	7,596	1,533	3,366	30,629
1974 Average.....	1,009	1,375	6,022	1,971	2,546	1,521	2,255	518	8,480	1,679	2,976	30,351
1975 Average.....	983	1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	26,771
1976 Average.....	1,075	1,504	5,883	2,415	2,145	1,933	2,067	497	8,577	1,936	2,294	30,327
1977 Average.....	1,152	1,686	5,663	2,348	1,969	2,063	2,085	445	9,245	1,999	2,238	30,893
1978 Average.....	1,231	1,635	5,242	2,563	2,131	1,983	1,897	487	8,301	1,831	2,165	29,464
1979 Average.....	1,224	1,591	3,168	3,477	2,500	2,092	2,302	508	9,532	1,831	2,356	30,581
1980 Average.....	1,106	1,577	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	26,606
1981 Average.....	1,002	1,605	1,380	1,000	1,125	1,140	1,433	405	9,815	1,474	2,102	22,481
1982 Average.....	987	1,339	2,214	1,012	823	1,150	1,295	330	6,483	1,250	1,895	18,778
1983 Average.....	968	1,343	2,440	1,005	1,064	1,105	1,241	295	5,086	1,149	1,801	17,497
1984 Average.....	1,014	1,412	2,174	1,209	1,157	1,087	1,388	394	4,663	1,146	1,798	17,442
1985 Average.....	1,037	1,325	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	16,181
1986 Average.....	945	1,390	2,035	1,690	1,419	1,034	1,467	308	4,870	1,330	1,787	18,275
1987 Average.....	1,048	1,343	2,298	2,079	1,585	972	1,341	293	4,265	1,541	1,752	18,517
1988 Average.....	1,040	1,342	2,240	2,685	1,492	1,175	1,450	346	5,086	1,565	1,903	20,324
1989 Average.....	1,095	1,409	2,810	2,897	1,783	1,150	1,716	380	5,064	1,860	1,907	22,071
1990 Average.....	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average.....	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average.....	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average.....	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average.....	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average.....	1,202	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,004
1996 Average.....	1,242	1,547	3,686	579	2,062	1,401	2,188	510	8,218	2,278	3,053	26,764
1997 Average .....	1,277	1,546	3,664	1,187	2,083	1,446	2,317	649	8,562	2,316	3,315	28,362
1998 Average P.....	1,246	1,518	3,634	2,150	2,085	1,378	2,153	696	8,389	2,345	3,167	28,762

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1970 through 1989 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia.

P=Preliminary.

Notes: •OPEC=Organization of Petroleum Exporting Countries.

Sources: See end of Section 4.

Table 4.1b World Crude Oil Production (Including Lease Condensate), 1970-1998  
 (Thousand Barrels per Day)

	Norway	United Kingdom	North Sea <sup>1/</sup>	Angola	Argen-tina	Austra-lia	Brazil	Canada	China	Colombia	Ecuador
1970 Average.....	0	2	0	112	393	178	167	1,263	600	219	4
1971 Average.....	6	2	6	93	423	309	174	1,348	780	214	4
1972 Average.....	33	2	35	140	433	327	167	1,532	900	196	78
1973 Average.....	32	2	36	162	420	369	169	1,798	1,090	184	209
1974 Average.....	35	2	38	169	414	388	176	1,551	1,315	168	177
1975 Average.....	189	12	202	165	395	409	177	1,430	1,490	157	161
1976 Average.....	279	245	525	108	398	426	167	1,314	1,670	146	188
1977 Average.....	280	768	1,055	194	431	431	161	1,321	1,874	138	183
1978 Average.....	356	1,082	1,446	131	453	432	160	1,316	2,082	131	202
1979 Average.....	403	1,568	1,976	147	473	441	166	1,500	2,122	124	214
1980 Average.....	528	1,622	2,151	150	491	380	182	1,435	2,114	126	204
1981 Average.....	501	1,811	2,322	130	496	394	213	1,285	2,012	125	211
1982 Average.....	520	2,065	2,617	122	491	370	260	1,271	2,045	141	211
1983 Average.....	614	2,291	2,965	177	491	416	339	1,356	2,120	152	237
1984 Average.....	697	2,480	3,250	208	478	492	475	1,438	2,296	168	258
1985 Average.....	788	2,530	3,417	231	460	575	564	1,471	2,505	176	281
1986 Average.....	870	2,539	3,547	282	434	520	572	1,474	2,620	305	293
1987 Average.....	1,022	2,406	3,584	360	428	547	566	1,535	2,690	385	174
1988 Average.....	1,158	2,232	3,540	452	449	538	554	1,616	2,730	378	302
1989 Average.....	1,554	1,802	3,515	455	460	490	596	1,560	2,757	403	279
1990 Average.....	1,704	1,820	3,667	475	483	575	631	1,553	2,774	440	285
1991 Average.....	1,890	1,797	3,811	500	485	545	630	1,548	2,835	419	299
1992 Average.....	2,229	1,825	4,182	526	553	535	626	1,605	2,845	433	321
1993 Average.....	2,350	1,915	4,403	509	594	503	643	1,679	2,890	456	344
1994 Average.....	2,521	2,375	5,058	536	650	536	671	1,746	2,939	450	365
1995 Average.....	2,768	2,489	5,400	646	715	562	695	1,805	2,990	585	392
1996 Average.....	3,104	2,568	5,822	709	756	570	795	1,837	3,131	623	396
1997 Average .....	3,153	2,517	5,843	720	835	588	833	1,893	3,200	662	381
1998 Average P....	3,017	2,616	5,804	735	847	544	971	1,981	3,198	759	377

1/ North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.

P=Preliminary.

Sources: See end of Section 4.

Table 4.1c World Crude Oil Production (Including Lease Condensate), 1970-1998  
 (Thousand Barrels per Day)

	Egypt	Gabon	India	Malaysia	Mexico	Oman	Russia	Former U.S.S.R.	Syria	United States	Other <sup>1</sup> / World
1970 Average.....	326	109	144	18	487	332	--	6,985	80	9,637	1,529
1971 Average.....	293	115	143	69	486	294	--	7,475	100	9,463	1,518
1972 Average.....	231	125	156	93	505	282	--	7,890	124	9,441	1,592
1973 Average.....	165	150	147	91	465	293	--	8,324	105	9,208	1,667
1974 Average.....	150	202	156	81	571	290	--	8,912	124	8,774	1,711
1975 Average.....	235	223	165	98	705	343	--	9,523	170	8,375	1,636
1976 Average.....	330	223	175	165	831	366	--	10,060	175	8,132	1,620
1977 Average.....	415	222	199	184	981	341	--	10,603	188	8,245	1,655
1978 Average.....	485	209	226	217	1,209	315	--	11,105	170	8,707	1,706
1979 Average.....	525	203	245	283	1,461	295	--	11,384	166	8,552	1,821
1980 Average.....	595	175	182	283	1,936	282	--	11,706	164	8,597	1,842
1981 Average.....	598	151	325	264	2,313	319	--	11,850	166	8,572	1,859
1982 Average.....	670	156	390	306	2,748	324	--	11,912	160	8,649	1,892
1983 Average.....	727	157	480	365	2,689	375	--	11,972	167	8,688	1,946
1984 Average.....	822	157	519	440	2,780	414	--	11,861	170	8,879	2,015
1985 Average.....	887	172	620	440	2,745	498	--	11,585	178	8,971	2,124
1986 Average.....	813	166	630	504	2,435	560	--	11,895	194	8,680	2,166
1987 Average.....	896	155	609	497	2,548	582	--	12,050	230	8,349	2,120
1988 Average.....	848	159	635	540	2,512	617	--	12,053	265	8,140	2,235
1989 Average.....	865	208	700	585	2,520	641	--	11,715	340	7,613	2,249
1990 Average.....	873	270	660	619	2,553	685	--	10,975	388	7,355	2,253
1991 Average.....	874	294	615	646	2,680	700	--	9,992	492	7,417	2,274
1992 Average.....	881	298	561	653	2,669	740	7,632	--	481	7,171	3,228
1993 Average.....	890	313	534	640	2,673	776	6,730	--	554	6,847	3,280
1994 Average.....	896	329	590	645	2,685	810	6,135	--	560	6,662	3,382
1995 Average.....	920	365	703	682	2,618	851	5,995	--	575	6,560	3,410
1996 Average.....	922	368	651	695	2,855	883	5,850	--	604	6,465	3,509
1997 Average .....	874	368	675	746	3,023	887	5,884	--	561	6,452	3,706
1998 Average P....	866	361	661	733	3,070	900	5,938	--	553	6,243	3,732
											66,865

1/ Other is a calculated total derived from the difference between "World" and the sum of production in "Total OPEC" (Table 1.1a) and all other countries listed (Tables 1.1b and 1.1c). The total "North Sea" is not subtracted from the world total, though Norway and the United Kingdom have been subtracted.

-- = Not applicable. P=Preliminary.

Sources: See end of Section 4.

Table 4.2 OPEC Crude Oil Production (Excluding Condensate), 1980-1998  
 (Thousand Barrels per Day)

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1980 Average...	1,006	1,497	1,662	2,514	1,656	1,787	2,045	472	9,900	1,704	2,147	26,390
1981 Average...	802	1,513	1,380	1,000	1,125	1,140	1,423	405	9,815	1,469	2,083	22,155
1982 Average...	712	1,247	2,214	1,012	823	1,150	1,285	330	6,483	1,215	1,878	18,349
1983 Average...	648	1,245	2,440	1,005	1,064	1,105	1,231	295	5,086	1,109	1,768	16,996
1984 Average...	694	1,279	2,174	1,209	1,157	1,087	1,368	394	4,663	1,091	1,689	16,805
1985 Average...	702	1,181	2,250	1,433	1,023	1,059	1,475	301	3,388	1,133	1,558	15,503
1986 Average...	600	1,257	2,035	1,690	1,419	1,034	1,447	308	4,870	1,270	1,645	17,575
1987 Average...	648	1,189	2,298	2,079	1,585	972	1,291	293	4,265	1,441	1,587	17,648
1988 Average...	640	1,177	2,240	2,685	1,492	1,175	1,400	346	5,086	1,465	1,715	19,421
1989 Average...	690	1,231	2,810	2,897	1,783	1,150	1,666	380	5,064	1,783	1,747	21,201
1990 Average...	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	2,097	22,458
1991 Average...	800	1,410	3,312	305	190	1,483	1,832	395	8,115	2,326	2,338	22,506
1992 Average...	772	1,326	3,429	425	1,058	1,433	1,820	423	8,332	2,206	2,334	23,558
1993 Average...	747	1,327	3,540	512	1,852	1,361	1,835	413	8,198	2,109	2,410	24,304
1994 Average...	750	1,334	3,583	548	2,025	1,378	1,821	380	8,120	2,113	2,542	24,594
1995 Average...	767	1,343	3,608	555	2,057	1,390	1,878	407	8,231	2,148	2,710	25,094
1996 Average...	812	1,367	3,651	574	2,062	1,401	2,051	475	8,218	2,198	3,013	25,822
1997 Average ..	847	1,366	3,629	1,182	2,083	1,446	2,217	614	8,562	2,236	3,275	27,457
1998 Average P.	816	1,338	3,599	2,145	2,085	1,378	2,043	661	8,389	2,265	3,127	27,847

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia.

P=Preliminary.

Note: OPEC=Organization of Petroleum Exporting Countries. See Appendix A for Countries in this group.

Sources: See end of Section 4.

**Table 4.3 World Natural Gas Plant Liquids Production, 1970-1998**  
 (Thousand Barrels per Day)

	Algeria	Canada	Mexico	Saudi Arabia	Russia	Former USSR	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1970 Average.....	3	200	58	50	--	120	1,660	119	137	205	2,383
1971 Average.....	4	234	59	50	--	135	1,693	138	147	243	2,508
1972 Average.....	4	293	61	55	--	155	1,744	155	159	275	2,676
1973 Average.....	9	314	75	90	--	170	1,738	191	196	324	2,785
1974 Average.....	12	314	80	130	--	190	1,688	231	219	347	2,789
1975 Average.....	20	309	80	140	--	205	1,633	246	252	372	2,790
1976 Average.....	24	289	95	185	--	220	1,603	291	313	442	2,865
1977 Average.....	19	290	105	215	--	235	1,618	335	366	482	2,982
1978 Average.....	25	281	115	250	--	255	1,567	410	447	566	3,078
1979 Average.....	30	331	150	303	--	270	1,584	458	535	637	3,285
1980 Average.....	36	331	193	369	--	285	1,573	534	618	732	3,444
1981 Average.....	49	330	241	433	--	300	1,609	599	691	825	3,625
1982 Average.....	58	318	255	430	--	315	1,550	612	721	842	3,626
1983 Average.....	56	309	265	330	--	330	1,559	552	655	780	3,635
1984 Average.....	105	336	257	355	--	340	1,630	604	761	869	3,869
1985 Average.....	120	337	271	375	--	350	1,609	645	808	892	3,938
1986 Average.....	120	328	352	385	--	440	1,551	700	860	969	4,150
1987 Average.....	140	367	338	418	--	430	1,595	721	900	1,006	4,279
1988 Average.....	120	381	370	499	--	450	1,625	808	979	1,077	4,481
1989 Average.....	130	410	384	503	--	425	1,546	851	1,041	1,188	4,502
1990 Average.....	130	426	428	620	--	425	1,559	930	1,107	1,281	4,632
1991 Average.....	140	431	457	680	--	420	1,659	931	1,113	1,299	4,827
1992 Average.....	140	460	454	713	230	--	1,697	1,003	1,185	1,364	4,975
1993 Average.....	145	506	459	704	220	--	1,736	1,040	1,238	1,435	5,181
1994 Average.....	140	529	461	698	200	--	1,727	1,071	1,267	1,465	5,293
1995 Average.....	145	581	447	701	180	--	1,762	1,106	1,301	1,506	5,485
1996 Average.....	150	596	423	697	185	--	1,830	1,082	1,295	1,501	5,582
1997 Average .....	145	631	386	723	200	--	1,817	1,108	1,310	1,488	5,571
1998 Average P....	145	651	424	711	230	--	1,753	1,161	1,385	1,551	5,709

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.

See Appendix A for countries in these groups.

P=Preliminary.

Sources: See end of Section 4.

**Table 4.4 World Oil Supply, 1970-1998**  
 (Thousand Barrels per Day)

	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1970 Average.....	11,673	13,541	14,571	23,567	48,986
1971 Average.....	11,554	15,940	15,427	25,514	51,766
1972 Average.....	11,601	17,734	16,451	27,228	54,574
1973 Average.....	11,428	20,895	18,656	31,015	59,300
1974 Average.....	10,978	21,550	18,399	30,762	59,391
1975 Average.....	10,505	19,223	16,831	27,218	56,511
1976 Average.....	10,251	21,847	19,563	30,841	61,121
1977 Average.....	10,437	22,098	20,372	31,443	63,665
1978 Average.....	10,820	21,067	19,819	30,120	64,225
1979 Average.....	10,707	21,569	22,575	31,300	66,973
1980 Average.....	10,809	18,541	20,715	27,419	64,152
1981 Average.....	10,739	15,894	17,619	23,393	60,761
1982 Average.....	10,783	12,815	13,786	19,702	58,225
1983 Average.....	10,788	11,676	12,416	18,352	58,054
1984 Average.....	11,107	11,433	12,619	18,389	59,644
1985 Average.....	11,192	10,320	11,498	17,151	59,262
1986 Average.....	10,905	12,441	13,653	19,310	61,769
1987 Average.....	10,648	12,869	13,992	19,589	62,427
1988 Average.....	10,473	14,310	15,662	21,465	64,705
1989 Average.....	9,880	15,733	16,658	23,323	65,892
1990 Average.....	9,677	16,249	17,232	24,536	66,754
1991 Average.....	9,883	15,704	16,747	24,625	66,632
1992 Average.....	9,768	17,010	17,871	25,818	66,960
1993 Average.....	9,602	17,792	18,505	26,610	67,361
1994 Average.....	9,413	18,072	18,745	27,031	68,250
1995 Average.....	9,400	18,351	19,069	27,566	69,860
1996 Average.....	9,445	18,486	19,259	28,321	71,764
1997 Average .....	9,461	19,641	20,407	29,905	74,091
1998 Average P.....	9,241	20,532	21,236	30,369	74,834

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.

See Appendix A for countries in these groups.

P=Preliminary.

Note: Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery gain. See Explanatory Note 1 in Appendix B.

Sources: See end of Section 4.

Table 4.5 Oil Stocks in OECD Countries, End of Year  
(Million Barrels)

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1973	December.....	201	152	181	156	1,070	1,008	140	303	67	2,588
1974	December.....	249	167	213	191	1,227	1,074	145	370	64	2,880
1975	December.....	225	143	187	165	1,154	1,133	174	375	67	2,903
1976	December.....	234	143	208	165	1,205	1,112	153	380	68	2,918
1977	December.....	239	161	225	148	1,268	1,312	167	409	68	3,224
1978	December.....	201	154	238	157	1,219	1,278	144	413	68	3,122
1979	December.....	226	163	272	169	1,353	1,341	150	460	75	3,379
1980	December.....	243	170	319	168	1,464	1,392	164	495	72	3,587
1981	December.....	214	167	297	143	1,337	1,484	161	482	67	3,531
1982	December.....	193	179	272	125	1,258	1,430	136	484	68	3,376
1983	December.....	153	149	249	118	1,142	1,454	121	470	68	3,255
1984	December.....	152	159	239	112	1,130	1,556	128	479	69	3,362
1985	December.....	139	157	233	123	1,092	1,519	113	494	66	3,284
1986	December.....	127	155	252	124	1,133	1,593	111	509	72	3,418
1987	December.....	127	169	259	121	1,130	1,607	126	540	71	3,474
1988	December.....	140	155	266	112	1,118	1,597	116	538	71	3,440
1989	December.....	138	164	271	118	1,133	1,581	114	577	71	3,476
1990	December.....	140	172	265	112	1,163	1,621	121	590	73	3,568
1991	December.....	153	160	288	119	1,181	1,617	119	606	65	3,588
1992	December.....	146	174	310	113	1,219	1,592	107	603	67	3,588
1993	December.....	158	163	309	118	1,221	1,647	105	618	69	3,661
1994	December.....	158	164	312	115	1,240	1,653	119	645	69	3,726
1995	December.....	159	162	301	107	1,228	1,563	109	630	71	3,601
1996	December.....	158	152	300	108	1,256	1,507	103	651	74	3,591
1997	December .....	164	147	298	105	1,256	1,560	115	685	74	3,689
1998	December P...	161	153	321	108	1,317	1,647	118	649	66	3,797

1/ Data through December 1990 are for the former West Germany. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ U.S. geographic coverage is the 50 States and the District of Columbia. In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported. Using the new basis, the end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982.

4/ "Other" consists of Australia, New Zealand, and the U.S. Territories.

P=Preliminary.

Note: Oil Stocks - See Explanatory Note 2 in Appendix B.

Sources: See end of Section 4.

Table 4.6 World Oil Demand, 1970-1998  
(Thousand Barrels per Day)

	France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Excluding East Germany	East Germany	OECD Including East Germany	World Total
1970 Average...	1,937	1,710	2,607	2,096	12,404	14,697	1,516	3,817	836	33,270	223	33,493	46,808
1971 Average...	2,115	1,838	2,702	2,141	13,005	15,213	1,565	4,142	831	34,755	238	34,993	49,416
1972 Average...	2,322	1,947	2,859	2,284	13,934	16,367	1,664	4,363	948	37,275	270	37,545	53,094
1973 Average...	2,601	2,068	3,055	2,341	14,925	17,308	1,729	4,949	988	39,900	282	40,182	57,237
1974 Average...	2,447	2,004	2,748	2,210	13,988	16,653	1,779	4,864	1,095	38,379	307	38,686	56,677
1975 Average...	2,252	1,855	2,650	1,911	13,217	16,322	1,779	4,621	1,041	36,980	307	37,287	56,198
1976 Average...	2,420	1,971	2,877	1,892	14,124	17,461	1,818	4,837	1,119	39,358	329	39,687	59,673
1977 Average...	2,294	1,897	2,865	1,905	13,916	18,431	1,850	4,880	1,160	40,237	347	40,584	61,826
1978 Average...	2,408	1,952	2,927	1,938	14,290	18,847	1,902	4,945	1,204	41,187	363	41,550	64,158
1979 Average...	2,463	2,039	3,003	1,971	14,667	18,513	1,971	5,050	1,178	41,379	369	41,748	65,220
1980 Average...	2,256	1,934	2,707	1,725	13,634	17,056	1,873	4,960	1,072	38,595	375	38,970	63,067
1981 Average...	2,023	1,874	2,449	1,590	12,515	16,058	1,768	4,848	1,080	36,269	355	36,624	60,903
1982 Average...	1,880	1,781	2,372	1,590	12,053	15,296	1,578	4,582	1,008	34,517	371	34,888	59,503
1983 Average...	1,835	1,750	2,324	1,531	11,765	15,231	1,448	4,395	953	33,793	336	34,129	58,739
1984 Average...	1,754	1,646	2,322	1,849	11,736	15,726	1,472	4,576	990	34,500	340	34,840	59,831
1985 Average...	1,775	1,717	2,338	1,634	11,681	15,726	1,504	4,384	976	34,271	362	34,633	60,091
1986 Average...	1,772	1,738	2,498	1,649	12,102	16,281	1,506	4,439	951	35,279	362	35,641	61,759
1987 Average...	1,789	1,855	2,424	1,603	12,255	16,665	1,548	4,484	959	35,911	342	36,253	62,999
1988 Average...	1,797	1,836	2,422	1,697	12,427	17,283	1,693	4,752	939	37,093	322	37,415	64,819
1989 Average...	1,857	1,930	2,280	1,738	12,531	17,325	1,733	4,983	998	37,570	300	37,871	65,917
1990 Average...	1,818	1,872	2,382	1,752	12,629	16,988	1,690	5,140	1,027	37,475	282	37,758	65,985
1991 Average...	1,935	1,863	2,828	1,801	13,391	16,714	1,622	5,284	1,056	--	--	38,067	66,577
1992 Average...	1,926	1,937	2,843	1,803	13,605	17,033	1,643	5,446	1,041	--	--	38,768	66,742
1993 Average...	1,875	1,852	2,900	1,815	13,523	17,237	1,688	5,401	1,118	--	--	38,967	67,043
1994 Average...	1,833	1,841	2,879	1,837	13,597	17,718	1,727	5,674	1,174	--	--	39,890	68,313
1995 Average...	1,896	2,048	2,875	1,845	14,120	17,725	1,755	5,711	1,243	--	--	40,553	69,926
1996 Average...	1,935	2,058	2,911	1,845	14,269	18,309	1,797	5,867	1,191	--	--	41,432	71,524
1997 Average ..	1,955	2,045	2,903	1,799	14,433	18,620	1,857	5,711	1,229	--	--	41,850	73,008
1998 Average P.	2,019	2,062	2,908	1,792	14,690	18,684	1,881	5,509	1,229	--	--	41,992	73,847

1/ Data through 1990 are for the former West Germany. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ U.S. geographic coverage is the 50 States and the District of Columbia.

4/ "Other" consists of Australia, New Zealand, and the U.S. Territories.

P=Preliminary. --=Not Applicable.

Note: The term Demand is used interchangeably with Consumption and Petroleum Products Supplied. See Appendix C for definition.

Sources: See end of Section 4.

Table 4.7 OECD Total Net Imports, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	Average										
Total.....	18.707	20.082	20.456	20.414	20.783	21.226	21.133	20.717	21.456	22.081	22.435
United States <sup>1/</sup> ....	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498	9.158	9.452
Canada.....	-.585	-.462	-.425	-.479	-.546	-.586	-.623	-.756	-.803	-.819	-.900
OECD Europe <sup>2/</sup> ....	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.339	7.340	7.919
Main European Importers											
France.....	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.738	1.769	1.878
Germany <sup>3/</sup> .....	2.278	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.793	2.804	2.888
Italy.....	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.791	1.795	1.831
Netherlands.....	.646	.635	.677	.690	.713	.688	.720	.700	.763	.773	.781
Spain.....	.869	.952	.950	.951	.998	1.066	1.119	1.202	1.183	1.273	1.365
European Net Exporters											
Norway.....	-1.036	-1.420	-1.543	-1.825	-2.102	-2.254	-2.586	-2.794	-3.150	-3.176	-3.043
United Kingdom....	-.760	-.200	-.214	-.158	-.221	-.355	-.850	-.969	-.839	-.968	-.969
Smaller European Importers											
Austria.....	.185	.191	.201	.212	.209	.205	.210	.194	.213	.223	.235
Belgium.....	.451	.454	.442	.506	.517	.503	.517	.495	.572	.590	.614
Denmark.....	.107	.078	.063	.048	.032	.023	.027	.039	.028	-.006	-.003
Ireland.....	.076	.079	.095	.094	.097	.102	.109	.116	.124	.133	.148
Finland.....	.200	.220	.208	.211	.188	.182	.234	.145	.180	.186	.211
Greece.....	.242	.252	.273	.297	.326	.327	.292	.343	.350	.361	.380
Iceland.....	.012	.011	.011	.012	.011	.014	.015	.015	.015	.016	.017
Luxembourg.....	.028	.031	.034	.039	.040	.039	.040	.036	.039	.040	.043
Portugal.....	.198	.246	.250	.258	.279	.272	.270	.291	.274	.296	.322
Sweden.....	.313	.290	.324	.312	.320	.335	.362	.356	.405	.371	.384
Switzerland.....	.258	.254	.273	.273	.277	.250	.262	.248	.260	.269	.278
Turkey.....	.397	.384	.425	.366	.413	.500	.490	.569	.600	.589	.558
Japan.....	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.790	5.819	5.406
Other OECD.....	.250	.313	.270	.392	.467	.599	.581	.644	.632	.583	.558

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.8 OECD Imports from OPEC, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total.....	13.049	14.521	15.576	15.360	15.567	16.018	15.765	15.469	15.630	16.540	16.938
United States <sup>1/</sup> ....	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194	4.542	4.789
Canada.....	.161	.205	.199	.210	.210	.268	.285	.257	.261	.312	.294
OECD Europe <sup>2/</sup> ....	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053	6.260	6.697
<b>Main European Importers</b>											
France.....	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897	.899	1.029
Germany <sup>3/</sup> .....	.761	.739	.771	.859	.957	.948	.838	.711	.660	.645	.656
Italy.....	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.244	1.353	1.421
Netherlands.....	.850	.892	.850	.900	.914	.982	.906	.791	.779	.774	.849
Spain.....	.604	.686	.652	.700	.632	.582	.668	.781	.775	.789	.867
<b>European Net Exporters</b>											
Norway.....	.002	.003	.007	.014	.004	.005	.003	.003	.001	.003	.000
United Kingdom....	.322	.342	.406	.377	.390	.439	.306	.254	.234	.199	.212
<b>Smaller European Importers</b>											
Austria.....	.082	.086	.097	.108	.115	.128	.119	.057	.023	.130	.131
Belgium.....	.302	.353	.313	.362	.359	.359	.284	.276	.284	.292	.341
Denmark.....	.067	.069	.044	.006	.001	.006	.008	.022	.027	.031	.033
Ireland.....	-	-	.000	.000	.000	.000	.000	.000	.000	.000	-
Finland.....	.011	.013	.013	.029	.033	.007	.004	.004	.001	.006	.004
Greece.....	.233	.244	.340	.298	.346	.303	.266	.263	.280	.317	.350
Portugal.....	.118	.156	.166	.139	.152	.166	.227	.209	.177	.188	.181
Sweden.....	.074	.064	.073	.105	.116	.123	.126	.109	.091	.096	.100
Switzerland.....	.051	.021	.036	.052	.051	.063	.082	.083	.098	.096	.102
Turkey.....	.439	.384	.388	.365	.412	.452	.475	.477	.483	.442	.419
Japan.....	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470	4.699	4.467
Other OECD.....	.298	.355	.510	.478	.512	.609	.563	.612	.653	.727	.690

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.9 OECD Imports from Persian Gulf, 1988-1998  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
<b>Imports from Persian Gulf</b>											
Total.....	7.941	9.121	9.667	9.249	9.456	10.029	9.609	9.310	9.215	9.952	10.516
United States <sup>1/</sup> ....	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.594	1.747	2.091
Canada.....	.056	.069	.081	.084	.092	.105	.119	.070	.111	.120	.097
OECD Europe <sup>2/</sup> ....	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.171	3.469	3.953
<b>Main European Importers</b>											
France.....	.484	.647	.864	.708	.640	.757	.651	.647	.573	.617	.730
Germany <sup>3/</sup> .....	.197	.216	.217	.227	.215	.250	.217	.172	.145	.157	.163
Italy.....	.643	.619	.626	.595	.573	.548	.430	.494	.502	.583	.658
Netherlands.....	.587	.663	.647	.609	.650	.744	.662	.563	.566	.584	.676
Spain.....	.306	.352	.291	.281	.231	.287	.275	.324	.304	.359	.419
<b>European Net Exporters</b>											
Norway.....	-	-	.000	.011	.000	.000	.000	.000	.000	.000	.000
United Kingdom...	.212	.240	.250	.222	.220	.303	.174	.135	.102	.094	.107
<b>Smaller European Importers</b>											
Austria.....	.025	.022	.016	.021	.031	.036	.038	.035	.004	.045	.050
Belgium.....	.224	.277	.250	.279	.292	.291	.232	.252	.263	.259	.307
Denmark.....	.063	.067	.043	.004	.000	.002	.000	.000	.000	.002	.007
Finland.....	.011	.012	.011	.021	.023	.002	.002	.002	.000	.000	.001
Greece.....	.146	.181	.268	.219	.291	.253	.214	.223	.235	.282	.322
Portugal.....	.066	.085	.073	.067	.074	.050	.117	.107	.083	.106	.134
Sweden.....	.045	.043	.039	.064	.068	.088	.076	.068	.067	.073	.071
Switzerland.....	.007	.007	.007	.007	.007	.008	.012	.007	.006	.008	.009
Turkey.....	.411	.323	.307	.324	.349	.429	.405	.336	.320	.301	.298
Japan.....	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.025	4.304	4.132
Other OECD.....	.241	.267	.322	.300	.338	.381	.316	.334	.313	.311	.243

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.10 United States--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498	9.158	9.452
Imports from OPEC <sup>1/</sup>	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194	4.542	4.789
Imports from Persian Gulf <sup>2/</sup>											
Total.....	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.594	1.747	2.091
Bahrain.....	.000	-.001	-.001	-.001	-.002	-.002	-.002	-.003	-.002	-.002	.000
Iran.....	.000	.000	.000	.032	.000	.000	.000	.000	.000	.000	.000
Iraq.....	.343	.449	.518	.000	.000	.000	.000	.000	.001	.089	.334
Kuwait.....	.092	.157	.086	.006	.051	.353	.312	.218	.236	.253	.281
U.A.E.....	.028	.027	.016	.001	.004	.009	.011	.004	-.003	-.003	.000
Qatar.....	.000	.002	.004	.000	.001	.001	.000	.000	.000	.004	.004
Saudi Arabia.....	1.063	1.224	1.339	1.797	1.720	1.414	1.402	1.344	1.363	1.406	1.472
Imports from OPEC-Africa											
Total.....	.918	1.084	1.080	.956	.876	.956	.880	.859	.872	.979	.971
Algeria.....	.300	.269	.280	.253	.196	.220	.243	.234	.256	.285	.288
Libya.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Nigeria.....	.618	.815	.800	.703	.680	.736	.637	.625	.616	.694	.683
Imports from OPEC-South America											
Total.....	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667	1.758	1.671
Venezuela.....	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667	1.758	1.671
Imports from OPEC-Far East											
Total.....	.205	.182	.113	.106	.075	.074	.109	.087	.058	.057	.056
Indonesia.....	.205	.182	.113	.106	.075	.074	.109	.087	.058	.057	.056

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •U.S. geographic coverage is the 50 States and District of Columbia. •Negative numbers represent net exports. •A dash (-) indicates no trade.

•Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.11 Japan--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.790	5.819	5.406
Imports from OPEC <sup>1/</sup>	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470	4.699	4.467
Imports from Persian Gulf <sup>2/</sup>											
Total.....	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.025	4.304	4.132
Bahrain.....	.036	.042	.037	.037	.029	.025	.028	.029	.033	.023	.016
Iran.....	.187	.291	.385	.383	.362	.384	.459	.399	.451	.461	.473
Iraq.....	.173	.219	.146	.000	.000	.000	.000	.000	.000	.015	.017
Kuwait.....	.341	.458	.291	.014	.220	.368	.430	.501	.500	.557	.507
U.A.E.....	.822	.929	1.032	1.285	1.256	1.287	1.398	1.420	1.396	1.441	1.402
Qatar.....	.203	.250	.263	.285	.300	.330	.328	.335	.335	.364	.450
Saudi Arabia.....	.930	.984	1.240	1.367	1.420	1.327	1.303	1.296	1.310	1.441	1.268
Imports from OPEC-Africa											
Total.....	.044	.015	.011	.011	.007	.008	.017	.026	.032	.036	.025
Algeria.....	.044	.015	.010	.010	.007	.008	.012	.011	.012	.014	.012
Nigeria.....	-	-	.001	.001	.000	.000	.005	.016	.020	.023	.013
Imports from OPEC-South America											
Total.....	.011	.011	.011	.010	.010	.009	.009	.002	.003	.003	.000
Venezuela.....	.011	.011	.011	.010	.010	.009	.009	.002	.003	.003	.000
Imports from OPEC-Far East											
Total.....	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380	.326
Indonesia.....	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380	.326

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.12 OECD Europe--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.339	7.340	7.919
Imports from OPEC <sup>1/</sup>	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053	6.260	6.697
Imports from Persian Gulf <sup>2/</sup>											
Total.....	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.171	3.469	3.953
Bahrain.....	.009	.005	.020	.002	.003	.004	.003	.000	.001	.001	.004
Iran.....	.850	1.076	1.190	1.132	1.113	1.253	1.074	1.149	1.059	.942	1.006
Iraq.....	.959	.897	.591	.000	.000	.001	.000	.000	.006	.336	.733
Kuwait.....	.474	.452	.346	.019	.142	.461	.302	.269	.288	.249	.275
U.A.E.....	.134	.214	.446	.281	.199	.092	.067	.011	.004	.009	.020
Qatar.....	.021	.024	.026	.009	.006	.000	.000	.002	.002	.000	.000
Saudi Arabia.....	.981	1.086	1.290	2.217	2.203	2.237	2.060	1.933	1.811	1.932	1.915
Imports from OPEC-Africa											
Total.....	2.198	2.224	2.509	2.818	2.818	2.491	2.644	2.500	2.644	2.569	2.512
Algeria.....	.646	.648	.683	.757	.772	.693	.690	.724	.746	.681	.711
Libya.....	1.071	1.044	1.267	1.332	1.361	1.193	1.233	1.201	1.204	1.268	1.296
Nigeria.....	.481	.532	.559	.729	.686	.605	.721	.575	.694	.620	.505
Imports from OPEC-South America											
Total.....	.220	.212	.227	.249	.268	.240	.219	.273	.206	.206	.213
Venezuela.....	.220	.212	.227	.249	.268	.240	.219	.273	.206	.206	.213
Imports from OPEC-Far East											
Total.....	.005	.004	.008	.002	.009	.019	.019	.017	.033	.017	.024
Indonesia.....	.005	.004	.008	.002	.009	.019	.019	.017	.033	.017	.024

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •"OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.13 France--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.738	1.769	1.878
Imports from OPEC <sup>1/</sup>	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897	.899	1.029
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.484	.647	.864	.708	.640	.757	.651	.647	.573	.617	.730
Bahrain.....	.007	.002	.011	.000	.001	.002	.000	.000	.001	.000	.002
Iran.....	.012	.158	.182	.171	.151	.243	.156	.208	.172	.127	.157
Iraq.....	.143	.128	.062	.000	.000	.000	.000	.000	.000	.078	.171
Kuwait.....	.017	.021	.015	.011	.029	.032	.016	.022	.017	.017	.019
U.A.E.....	.017	.040	.233	.064	.033	.025	.003	.002	.001	.000	.012
Qatar.....	.017	.009	.022	.003	.002	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.271	.288	.339	.459	.424	.454	.477	.416	.381	.394	.369
Imports from OPEC-Africa											
Total.....	.249	.218	.233	.296	.281	.242	.301	.262	.323	.282	.301
Algeria.....	.079	.089	.092	.107	.105	.066	.089	.103	.105	.131	.115
Libya.....	.090	.065	.079	.104	.087	.063	.059	.043	.051	.060	.061
Nigeria.....	.079	.064	.062	.084	.090	.112	.153	.115	.168	.091	.126
Imports from OPEC-South America											
Total.....	.011	.012	.015	.017	.011	.010	.003	.002	.001	.000	.000
Venezuela.....	.011	.012	.015	.017	.011	.010	.003	.002	.001	.000	.000
Imports from OPEC-Far East											
Total.....	-	.000	.000	.001	.001	.000	.000	.000	.000	.000	.000
Indonesia.....	-	.000	.000	.001	.001	.000	.000	.000	.000	.000	.000

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.14 Germany--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	2.278	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.793	2.804	2.888
Imports from OPEC <sup>1/</sup>	.761	.739	.771	.859	.957	.948	.838	.711	.660	.645	.656
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.197	.216	.217	.227	.215	.250	.217	.172	.145	.157	.163
Bahrain.....	-	-	-	-	-	.000	.001	.000	.000	.000	.000
Iran.....	.051	.041	.055	.053	.021	.053	.040	.031	.018	.023	.020
Iraq.....	.032	.009	.004	.000	.000	.000	.000	.000	.000	.001	.020
Kuwait.....	.013	.022	.013	.000	.009	.022	.026	.015	.016	.012	.016
U.A.E.....	.006	.023	.016	.012	.002	.002	.001	.000	.000	.001	.000
Qatar.....	.001	.002	.003	.002	.001	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.095	.119	.125	.161	.182	.173	.149	.125	.111	.120	.106
Imports from OPEC-Africa											
Total.....	.472	.436	.465	.524	.614	.594	.543	.461	.462	.442	.447
Algeria.....	.141	.106	.098	.126	.183	.195	.161	.135	.125	.095	.127
Libya.....	.237	.235	.244	.262	.252	.244	.244	.234	.258	.246	.277
Nigeria.....	.095	.095	.123	.136	.179	.154	.139	.093	.079	.101	.043
Imports from OPEC-South America											
Total.....	.091	.086	.088	.107	.128	.105	.079	.078	.053	.046	.046
Venezuela.....	.091	.086	.088	.107	.128	.105	.079	.078	.053	.046	.046
Imports from OPEC-Far East											
Total.....	-	-	.002	.000	.000	.000	.000	.000	.000	.000	.000
Indonesia.....	-	-	.002	.000	.000	.000	.000	.000	.000	.000	.000

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Data through 1990 are for the former West Germany. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.15 Italy--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.791	1.795	1.831
Imports from OPEC <sup>1/</sup>	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.244	1.353	1.421
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.643	.619	.626	.595	.573	.548	.430	.494	.502	.583	.658
Bahrain.....	-	.001	.000	.001	.001	.000	.000	.000	.001	.000	.002
Iran.....	.093	.124	.192	.231	.239	.221	.143	.233	.263	.258	.273
Iraq.....	.198	.138	.079	.000	.000	.000	.000	.000	.000	.033	.108
Kuwait.....	.118	.093	.063	.000	.007	.012	.001	.000	.000	.000	.000
U.A.E.....	.060	.085	.075	.044	.013	.002	.000	.000	.000	.000	.000
Qatar.....	.002	.008	.000	.004	.001	.000	.000	.002	.002	.000	.000
Saudi Arabia.....	.171	.171	.216	.315	.312	.313	.286	.260	.236	.291	.274
Imports from OPEC-Africa											
Total.....	.516	.626	.740	.793	.757	.653	.660	.679	.714	.745	.723
Algeria.....	.108	.150	.155	.155	.140	.096	.099	.100	.110	.086	.083
Libya.....	.389	.430	.556	.581	.584	.542	.543	.562	.580	.609	.601
Nigeria.....	.019	.045	.029	.057	.034	.015	.018	.017	.025	.050	.039
Imports from OPEC-South America											
Total.....	.029	.014	.007	.004	.005	.002	.007	.014	.008	.012	.020
Venezuela.....	.029	.014	.007	.004	.005	.002	.007	.014	.008	.012	.020
Imports from OPEC-Far East											
Total.....	.002	.002	.003	.001	.009	.019	.019	.015	.021	.014	.023
Indonesia.....	.002	.002	.003	.001	.009	.019	.019	.015	.021	.014	.023

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.16 OECD Imports from Iraq, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	Average										
Total.....	1.489	1.581	1.276	0.000	0.000	0.001	0.000	0.000	0.007	0.458	1.116
United States <sup>1/</sup> ....	.343	.449	.518	.000	.000	.000	.000	.000	.001	.089	.334
Canada.....	.001	.013	.011	.000	.000	.000	.000	.000	.000	.014	.014
OECD Europe <sup>2/</sup> ....	.959	.897	.591	.000	.000	.001	.000	.000	.006	.336	.733
Main European Importers											
France.....	.143	.128	.062	.000	.000	.000	.000	.000	.000	.078	.171
Germany <sup>3/</sup> .....	.032	.009	.004	.000	.000	.000	.000	.000	.000	.001	.020
Italy.....	.198	.138	.079	.000	.000	.000	.000	.000	.000	.033	.108
Netherlands.....	.039	.101	.117	.000	.000	.000	.000	.000	.000	.024	.113
Spain.....	.092	.109	.063	.000	.000	.000	.000	.000	.002	.074	.130
European Net Exporters											
United Kingdom....	.070	.034	.027	.000	.000	.000	.000	.000	.000	.000	-
Smaller European Importers											
Austria.....	.007	.000	.000	.000	.000	.001	.000	.000	.000	.017	.027
Belgium.....	.037	.047	.029	.000	.000	.000	.000	.000	.000	.010	.047
Denmark.....	-	-	.000	.000	.000	.000	.000	.000	.000	.000	-
Greece.....	.059	.052	.044	.000	.000	.000	.000	.000	.000	.013	.016
Portugal.....	.029	.024	.019	.000	.000	.000	.000	.000	.000	.011	.029
Sweden.....	.003	.005	.000	.000	.000	.000	.000	.000	.000	.000	-
Switzerland.....	-	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000
Turkey.....	.250	.250	.146	.000	.000	.000	.000	.000	.000	.074	.073
Japan.....	.173	.219	.146	.000	.000	.000	.000	.000	.000	.015	.017
Other OECD.....	.013	.003	.011	.000	.000	.000	.000	.000	.000	.005	.018

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.17 OECD Imports from Kuwait, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	Average										
Total.....	0.936	1.084	0.740	0.039	0.414	1.191	1.081	0.997	1.034	1.065	1.070
United States <sup>1/</sup> ....	.092	.157	.086	.006	.051	.353	.312	.218	.236	.253	.281
Canada.....	-	-	.004	-	-	.000	.027	.000	.000	.000	.000
OECD Europe <sup>2/</sup> ....	.474	.452	.346	.019	.142	.461	.302	.269	.288	.249	.275
Main European Importers											
France.....	.017	.021	.015	.011	.029	.032	.016	.022	.017	.017	.019
Germany <sup>3/</sup> .....	.013	.022	.013	.000	.009	.022	.026	.015	.016	.012	.016
Italy.....	.118	.093	.063	.000	.007	.012	.001	.000	.000	.000	.000
Netherlands.....	.189	.194	.151	.002	.052	.254	.179	.176	.193	.168	.176
Spain.....	.030	.015	.010	.003	.000	.015	.000	.000	.000	.000	.000
European Net Exporters											
Norway.....	-	-	-	-	-	.000	.000	.000	.000	.000	.000
United Kingdom....	.006	.006	.045	.002	.027	.049	.058	.039	.032	.031	.025
Smaller European Importers											
Austria.....	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000	-
Belgium.....	-	-	.000	.001	.006	.056	.005	.004	.015	.004	.014
Denmark.....	.060	.066	.034	.000	.000	.000	.000	.000	.000	.002	.007
Finland.....	-	-	-	.000	-	-	-	-	-	-	.001
Greece.....	.015	.009	.000	.000	.002	.005	.001	.000	.000	.000	.000
Portugal.....	.003	.003	.002	.000	.000	.000	.000	.000	.000	.000	-
Sweden.....	-	.001	.001	.000	.000	.002	.000	.000	.000	.000	.000
Switzerland.....	-	-	-	.000	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.019	.019	.011	.000	.010	.016	.016	.014	.015	.014	.016
Japan.....	.341	.458	.291	.014	.220	.368	.430	.501	.500	.557	.507
Other OECD.....	.029	.017	.013	.000	.000	.009	.011	.009	.010	.006	.006

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

## Sources for Section 4 (Historical Oil Data)

### Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: • Energy Information Administration (EIA), Petroleum Supply Annual 1997; • Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, various issues.

Other Countries: • EIA, International Energy Annual, various issues. • EIA, International Petroleum Annual, 1978. • United Nations, Yearbook of World Energy Statistics, 1979. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, November 1986.

### Oil Stocks

United States: EIA, Petroleum Supply Annual 1997.

Other OECD Countries: • 1973-1982: Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • 1983-1998: OECD, Monthly Oil Statistics in the EIA, International Energy Database.

### Oil Demand

United States: EIA, Petroleum Supply Annual 1997.

Other OECD Countries: • 1973-1981: OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Annual Oil Statistics data base, 1970-1979. • 1982-1998: OECD, Monthly Oil Statistics in the EIA International Energy Database.

### Oil Imports

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1997.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • OECD Monthly Oil Statistics database, 1991-1999.



## **Appendix A**

### **Organizational and Geographical Definitions**

## **Appendix A. Organizational and Geographical Definitions**

**International Energy Agency (IEA)** countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

**Organization for Economic Cooperation and Development (OECD)** countries are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Total OECD includes the United States Territories (Guam, Puerto Rico, and the U.S. Virgin Islands). Total OECD excludes data for Czech Republic, Hungary, Mexico, Poland, and South Korea which are not yet available.

**OECD Europe** countries are: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, and United Kingdom. OECD Europe excludes data for Czech Republic, Hungary, and Poland which are not yet available.

**Organization of Petroleum Exporting Countries (OPEC)** members are: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. As of December 31, 1992, Ecuador withdrew its membership in OPEC, and as of December 31, 1994, Gabon withdrew its membership. For consistency, Ecuador and Gabon are excluded in the historical series of OPEC totals.

**Arab members of OPEC** are: Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia and the United Arab Emirates.

**Organization of Arab Petroleum Exporting Countries (OAPEC)** are: Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Neutral Zone, Qatar, Saudi Arabia, Syria, Tunisia, and the United Arab Emirates. In April 1979 Egypt was suspended from OAPEC membership. In May 1989 Egypt rejoined OAPEC. For consistency, Egypt is included in the historical series of the OAPEC totals.

**Persian (Arabian) Gulf countries** are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

The term "Former USSR" is being used in the International Petroleum Statistics Report as a purely geographical expression, referring to the Commonwealth of Independent States (CIS), Georgia, and the three Baltic States (Estonia, Latvia, and Lithuania).

## **Appendix B**

### **Explanatory Notes**

## Appendix B. Explanatory Notes

### Note 1: World Oil Supply

Supply includes production of crude oil (including lease condensate), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gain, alcohol, and liquids produced from coal and other sources. Beginning in 1993, U.S. data includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants.

### Note 2: Oil Stocks

The International Energy Agency (IEA) assembles and reports total oil stock data for the member countries of the Organization for Economic Cooperation and Development (OECD). Oil stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined petroleum products. In its report titled Quarterly Oil Statistics and Energy Balances of OECD Countries, the IEA defines oil stocks as follows: "All non-military stocks held by importers (including all final consumers directly), refiners, Governments, major non-importing final consumers eligible under IEA/OECD commitments and by foreign entities in the following facilities: bulk terminals, refinery tanks, pipeline tankage, barges, intercoastal tankers (when port of departure and destination are in the reporting country), tankers in port (to the extent that their cargo is to be unloaded in the reporting country), and inland ship bunkers. Oil is reported regardless of the ownership of such storage facilities." IEA data exclude "oil held in pipelines, rail and truck tank cars, sea-going ships' bunkers, service stations, retail stores and tankers at sea." Also the IEA defines the United States to be the 50 States and the District of Columbia, and the U.S. Territories (Guam, Puerto Rico, and the U.S. Virgin Islands). The Energy Information Administration (EIA) does not include the United States Territories in its statistical definition of the United States. Further, the EIA includes oil in oil pipelines as part of its stock data. Tables 1.5, 1.6, 2.3, and 4.4 include oil stocks for the United States according to EIA definitions. Using IEA definitions, at the end of December 1998 United States (including territories) oil stocks totaled 1,487 million barrels.

### Note 3: A Change to the Oil Balance in Section 2.

Prior to August 1992, Section 2 of the International Petroleum Statistics Report presented a balance of oil supply, demand, and stock change for the Market Economies, at quarterly time intervals. The communist countries, or Centrally Planned Economies (CPEs) were not included in the balance, mainly because good quarterly data for oil demand in these countries were not available. Net imports from the CPEs were included in the balance as part of total Market Economies supply. At present, the former Soviet Union and most of the countries of Eastern Europe are in transition from communism to market economies; because of this there are no longer good political or economic reasons to publish an oil balance only for the countries that have traditionally been market economies. Beginning with the August 1992 edition, Section 2 of the International Petroleum Statistics Report was changed from a Market Economies oil balance to a world oil balance.

The main data issues related to this change may be summarized as follows:

**Supply Data.** Monthly oil supply data are available for all countries of the world. These data are used to generate Tables 1.1 to 1.4; they were used to expand the Section 2 supply table (Table 2.2) to the whole world.

Demand Data. EIA has now developed quarterly figures for world oil demand, including demand in the former CPEs; these are published in Table 4 of EIA's Short-Term Energy Outlook. The procedures involved in developing quarterly world demand numbers may be summarized as follows:

Complete monthly data are available for the 24 OECD countries. Annual demand data for all countries (about 200 countries) are presented in EIA's International Energy Annual. In 1993, the OECD accounted for about three-fifths of total world demand, the 25 largest consumers outside of the OECD accounted for about one-third of the world total, and the remaining countries (about 150 countries) accounted for less than one-tenth of the total. The key problem, therefore, is to develop good figures for the 25 largest consumers outside the OECD.

Of these 25 countries, by far the largest consumer is Russia, which in 1993 accounted for about one-sixth of the demand in the group of 25. The next largest consumer is China, which in 1993 accounted for about one-seventh of the demand in the group. Thus in 1993 Russia and China accounted for one-third of the demand in the group of 25. For these 2 countries, data are available on oil production and net exports. The demand numbers shown in Section 2 are computed as production minus net exports. This is the same procedure used in the EIA Short-Term Energy Outlook, by the International Energy Agency in their Monthly Oil Market Report, and in other respected publications that deal with international oil markets. Note, however, that this method of computing demand ignores both refinery gain and stock changes.

For other major consuming countries outside of the OECD, quarterly demand data are developed based upon the latest available annual data, analytic judgment about current trends, and some seasonal adjustments. These are the same procedures used for the Short-Term Energy Outlook.

Stocks Data. Reliable stocks data are available for the OECD countries. Estimates of stocks for export and afloat, and of commercial floating stocks, are available. (See sources at the end of Section 2.)

For on-land stocks outside the OECD, there is little reliable data. Most estimates of on-land stocks outside the OECD are based on the theory that stocks are approximately equal to some number of days of demand. Demand figures (which themselves involve some degree of estimation) are then used to compute estimates of stock levels.

In the International Petroleum Statistics Report, it had been the practice for some time to estimate that on-land stocks in the traditional market economies outside of the OECD were equal to 55 days of demand. This was acceptable, mainly because the rule was used only to estimate a relatively small part of total stocks (about 16 percent).

When Section 2 was converted from a Market Economies oil balance to a world oil balance, there were important changes in the conditions that made it reasonable to estimate on-land stocks outside of the OECD using the rule of 55 days of demand. When the CPEs are included, the stocks that must be estimated are a considerably larger part of the total. In 1990, total oil demand in the former CPEs was more than 80 percent as large as demand in all of the non-OECD traditional market economies. Thus the quantity of stocks that would have to be estimated using a 55-day rule would nearly double, and the estimated components of stock levels and stock changes would become relatively large parts of the total. One consequence of this is that the statistical discrepancy (as shown in Table 2.1) would become less useful as an indicator of the overall consistency of the data. The statistical discrepancy is computed from supply, demand, and stock change. If a large part of the stock change is estimated, then the statistical discrepancy loses much of its significance.

As already noted, quarterly demands in the former Soviet Union and in China are computed as production minus net exports. This computation implicitly assumes a zero stock change. Demand in the former Soviet Union is falling. If we were to use a 55-day rule to compute stock levels, falling demand would imply falling stock levels. This would contradict the assumption of zero stock change which was used in computing demand.

In view of all this, the following approach has been adopted. Table 2.3 now shows levels of stocks for the OECD countries, levels of stocks for export and afloat, and levels of commercial floating storage. Stock changes based on these stock levels are shown in Table 2.1. At this time, no other stock levels are shown. Table 2.1 now has a single line labelled "Other Stock Draw and Statistical Discrepancy", which contains the computed values needed to make the table balance.

It may become possible in the future to obtain reliable information on certain categories of on-land stocks outside the OECD. If such data become available, they will be added to Table 2.3, and the corresponding stock change information will be added to Table 2.1.

Changes in Formats and Sign Conventions. There were several changes in Section 2 to make the International Petroleum Statistics Report more consistent with other EIA publications, especially with the Short-Term Energy Outlook. The numbers were changed from 1 decimal place to 2 decimal places. The word "consumption", as used before August 1992, was changed to "demand". The sign convention for stock changes in Table 2.1 was changed. Stock draws are now indicated by positive numbers, and stock additions are indicated by negative numbers. Table 2.1 also uses a new sign convention for the line labelled "Other Stock Draw and Statistical Discrepancy". The values in this line are now computed as Total Demand minus the sum of Total Supply and Total Reported Stock Draw. This is the reverse of the sign convention used before August 1992.

Summary. Section 2 was expanded from a Market Economies oil balance to a world oil balance. Supply data are tracked for all producing countries. Demand data are tracked for the 24 OECD countries, and for 25 large consumers outside of the OECD. Demand for the remaining countries (less than 10 percent of total demand) is estimated, for years that are not yet available in the International Energy Annual. The stock levels in these tables are based on reported data for the OECD and for stocks at sea. The line in Table 2.1 labelled "Other Stock Draw and Statistical Discrepancy" is a balancing item.



## **Appendix C**

### **Glossary**

## Appendix C. Glossary

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The molecules in the series vary in chain length and are composed of a hydrocarbon plus a hydroxyl group. Alcohol includes methanol and ethanol.

**Demand (Consumption/Petroleum Products Supplied).** Total petroleum products supplied is the sum of all petroleum products supplied. For each product, the amount supplied is calculated by summing production, crude oil burned directly, imports, and net withdrawals from primary stocks and subtracting exports.

**Crude Oil.** A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Crude oil production is measured at the wellhead and includes lease condensate.

**Government-Owned Stocks.** Oil stocks owned by the national government and held for national security. In the United States these stocks are known as the Strategic Petroleum Reserve.

**Lease Condensate.** A liquid recovered from natural gas at the well or at small gas/oil separators in the field. Consists primarily of pentanes and heavier hydrocarbons (also called field condensate).

**Natural Gas Plant Liquids.** Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants, and fractionators. Products obtained include ethane, liquefied petroleum gases, (propanes, butane, propane-butane mixtures, and ethane-propane mixtures), isopentane, natural gasoline, unfractionated streams, plant condensate, and other minor quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

**Oil Stocks.** Oil stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined petroleum products. See Explanatory Note 2.

**Other Hydrocarbons.** Other materials processed at refineries. Includes coal tar derivatives, hydrogen, gilsonite, and natural gas received by the refinery for reforming into hydrogen.

**Oxygenates.** Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. They include: Fuel Ethanol, Methanol, and MTBE (Methyl tertiary butyl ether).

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt road oil, still gas, and other miscellaneous products.

**Processing Gain.** The amount by which the total volume of refinery output is greater than the volume of input for given period of time. The processing gain arises when crude oil and other hydrocarbons are processed into products that are, on average, less dense than the input.

**Processing Loss.** The amount by which the total volume of refinery output is less than the volume of input for given period of time. The processing loss arises when crude oil and other hydrocarbons are processed into products that are, on average, more dense than the input.

## **Appendix D**

### **Estimation Procedures**

## Appendix D. Estimation Procedures

Estimation procedures are used for demand numbers in many of the countries outside of the OECD, in cases where data from EIA's International Energy Annual are not yet available. Demand numbers for 1996 and earlier years, for all countries, may be found in EIA's International Energy Annual 1996, published in February 1998, which is the most recent published edition of the International Energy Annual. EIA's WORLD ENERGY database contains final demand data for all countries of the world for 1995, and preliminary demand data for all countries for 1996. Instructions for downloading this database may be found on EIA's home page (<http://www.eia.doe.gov/emeu/world/main1.html>). The status of the demand numbers shown in Section 2 of this current International Petroleum Statistics Report may be summarized as follows.

The OECD demand numbers are, as usual, based on the latest Quarterly Oil Statistics and Monthly Oil Statistics data from the International Energy Agency.

For countries outside of the OECD, the following approach is used. The numbers for 1996 and earlier years match the demand numbers in the WORLD ENERGY database on EIA's home page. Numbers for 1997 forward are the best available EIA estimates, based upon the best annual data currently available, analytic judgment about current trends, and some seasonal adjustments. These are the same numbers that appear in the international oil balance table in EIA's Short-Term Energy Outlook.

The two largest non-OECD oil consumers are the former Soviet Union and China. For these two countries, published data are available on production and net exports. Demand is computed as production minus net exports. This is the same approach used in the Short-Term Energy Outlook, by the International Energy Agency in their Monthly Oil Market Report, and in other major publications dealing with international oil data. Note, however, that because of this computation, the demand numbers for the former Soviet Union and China implicitly exclude stock draw and refinery gain.

## **Appendix E**

### **Conversions**

**Table E1. Refined Petroleum Products Conversion Factors**

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Product	Barrels per Metric Ton
Asphalt . . . . .	6.06
Distillate Fuel Oil . . . . .	7.46
Gasoline, Aviation . . . . .	8.90
Gasoline, Motor . . . . .	8.53
Greases . . . . .	6.30
Jet Fuel, Kerosene-type . . . . .	7.93
Jet Fuel, Naptha-type . . . . .	8.27
Kerosene . . . . .	7.73
Liquefied Petroleum Gas (LPG) . . . . .	11.60
Lubricants . . . . .	7.00
Miscellaneous Products . . . . .	8.04
Naphthas . . . . .	8.22
Natural Gas Liquids (NGL) . . . . .	10.40
Natural Gasoline . . . . .	10.00
Paraffin Oil . . . . .	7.14
Paraffin Wax . . . . .	7.87
Petrolatum . . . . .	7.87
Petroleum Coke . . . . .	5.51
Residual Fuel Oil . . . . .	6.66
White Spirits . . . . .	8.50

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Table E2. Barrels of Crude Oil per Metric Ton, 1988-1997

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>North America</b>										
Canada . . . . .	7.453	7.453	7.186	7.186	7.186	7.186	7.186	7.186	7.186	7.186
Mexico . . . . .	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965
United States . . . . .	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333
<b>Central &amp; South America</b>										
Argentina . . . . .	7.149	7.149	7.120	7.120	7.120	7.120	7.120	7.120	7.120	7.120
Bolivia . . . . .	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881
Brazil . . . . .	7.268	7.268	7.056	7.056	7.056	7.056	7.056	7.056	7.056	7.056
Chile . . . . .	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Colombia . . . . .	7.084	7.084	7.080	7.080	7.080	7.080	7.080	7.080	7.080	7.080
Cuba . . . . .	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449
Ecuador . . . . .	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130
Peru . . . . .	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407
Trinidad and Tobago . . . . .	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
Venezuela . . . . .	6.880	6.880	6.890	6.890	6.890	6.890	6.890	6.890	6.890	6.890
<b>Western Europe</b>										
Austria . . . . .	7.082	7.082	7.200	7.200	7.200	7.200	7.200	7.200	7.200	7.200
Denmark . . . . .	7.689	7.689	7.405	7.405	7.405	7.405	7.405	7.405	7.405	7.405
France . . . . .	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Germany . . . . .	--	--	--	7.330	7.330	7.330	7.330	7.330	7.330	7.330
Germany, East . . . . .	7.340	7.340	7.340	--	--	--	--	--	--	--
Germany, West . . . . .	7.247	7.247	7.247	--	--	--	--	--	--	--
Greece . . . . .	7.178	7.178	7.231	7.231	7.231	7.231	7.231	7.231	7.231	7.231
Italy . . . . .	6.853	6.853	7.300	7.300	7.300	7.300	7.300	7.300	7.300	7.300
Netherlands . . . . .	6.853	6.853	7.239	7.239	7.239	7.239	7.239	7.239	7.239	7.239
Norway . . . . .	7.810	7.810	7.644	7.644	7.644	7.644	7.644	7.644	7.644	7.644
Spain . . . . .	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Sweden . . . . .	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Turkey . . . . .	7.150	7.150	7.200	7.200	7.200	7.200	7.200	7.200	7.200	7.200
United Kingdom . . . . .	7.466	7.466	7.523	7.523	7.523	7.523	7.523	7.523	7.523	7.523
Former Yugoslavia . . . . .	7.418	7.418	7.418	7.418	--	--	--	--	--	--
Croatia . . . . .	--	--	--	--	7.418	7.418	7.418	7.418	7.418	7.418
Serbia and Montenegro . . . . .	--	--	--	--	7.418	7.418	7.418	7.418	7.418	7.418
Slovenia . . . . .	--	--	--	--	--	7.418	7.418	7.418	7.418	7.418

-- = No Production of this form of energy.

Sources: International Energy Annual 1997. DOE/EIA-0219(97) (April 1999).

Table E2. Barrels of Crude Oil per Metric Ton, 1988-1997 (continued)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Eastern Europe &amp; Former U.S.S.R.</b>										
Albania . . . . .	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594
Bulgaria . . . . .	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Former Czechoslovakia . . . . .	6.780	6.780	6.780	6.780	--	--	--	--	--	--
Czech Republic . . . . .	--	--	--	--	--	6.780	6.780	6.780	6.780	6.780
Slovakia . . . . .	--	--	--	--	--	6.780	6.780	6.780	6.780	6.780
Hungary . . . . .	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690
Poland . . . . .	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418
Romania . . . . .	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Former U.S.S.R. . . . .	7.270	7.270	7.270	7.270	--	--	--	--	--	--
Azerbaijan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Belarus . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Georgia . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Lithuania . . . . .	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Kazakhstan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Kyrgyzstan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Russia . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Tajikistan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Turkmenistan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Ukraine . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Uzbekistan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
<b>Middle East</b>										
Bahrain . . . . .	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Iran . . . . .	7.305	7.305	7.350	7.350	7.350	7.350	7.350	7.350	7.350	7.350
Iraq . . . . .	7.426	7.426	7.430	7.430	7.430	7.430	7.430	7.430	7.430	7.430
Israel . . . . .	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Jordan . . . . .	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190
Kuwait . . . . .	7.245	7.245	7.250	7.250	7.250	7.250	7.250	7.250	7.250	7.250
Oman . . . . .	7.332	7.332	7.330	7.330	7.330	7.330	7.330	7.330	7.330	7.330
Qatar . . . . .	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Saudi Arabia . . . . .	7.268	7.268	7.323	7.323	7.323	7.323	7.323	7.323	7.323	7.323
Syria . . . . .	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836
United Arab Emirates . . . . .	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480
Yemen . . . . .	7.632	7.632	7.631	7.631	7.631	7.631	7.631	7.631	7.631	7.631

-- = No Production of this form of energy.

Sources: International Energy Annual 1997. DOE/EIA-0219(97) (April 1999).

Table E2. Barrels of Crude Oil per Metric Ton, 1988-1997 (continued)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Africa</b>										
Algeria . . . . .	7.936	7.936	8.130	8.130	8.130	8.130	8.130	8.130	8.130	8.130
Angola . . . . .	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.410
Benin . . . . .	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870
Cameroon . . . . .	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205
Congo (Brazzaville) . . . . .	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Congo (Kinshasa) . . . . .	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Cote d'Ivoire (Ivory Coast) . . . . .	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Egypt . . . . .	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.260
Equatorial Guinea . . . . .	--	--	--	8.077	8.077	8.077	8.077	8.077	8.077	8.077
Gabon . . . . .	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Ghana . . . . .	--	--	--	--	7.285	7.285	7.285	7.285	7.285	7.285
Libya . . . . .	7.515	7.515	7.580	7.580	7.580	7.580	7.580	7.580	7.580	7.580
Morocco . . . . .	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Nigeria . . . . .	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.500
Sudan . . . . .	--	--	--	--	7.452	7.452	7.452	7.452	7.452	7.452
Tunisia . . . . .	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
<b>Far East &amp; Oceania</b>										
Australia . . . . .	7.855	7.855	7.868	7.868	7.868	7.868	7.868	7.868	7.868	7.868
Bangladesh . . . . .	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453
Brunei . . . . .	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340
Burma . . . . .	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
China . . . . .	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.300
India . . . . .	7.600	7.600	7.440	7.440	7.440	7.440	7.440	7.440	7.440	7.330
Indonesia . . . . .	7.558	7.558	7.360	7.360	7.360	7.360	7.360	7.360	7.360	7.360
Japan . . . . .	7.285	7.285	7.357	7.357	7.357	7.357	7.357	7.357	7.357	7.357
Malaysia . . . . .	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641
New Zealand . . . . .	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127
Pakistan . . . . .	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Papua New Guinea . . . . .	--	--	--	7.809	7.809	7.809	7.809	7.809	7.809	7.809
Philippines . . . . .	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Taiwan . . . . .	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568
Thailand . . . . .	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758
Vietnam . . . . .	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082

-- = No Production of this form of energy.

Sources: International Energy Annual 1997. DOE/EIA-0219(97) (April 1999).

